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This index covers all technical items—papers, correspondence, reviews, etc.—that appeared in this periodical during 2020, and items from previous years that were commented upon or corrected in 2020. Departments and other items may also be covered if they have been judged to have archival value.

The Author Index contains the primary entry for each item, listed under the first author's name. The primary entry includes the coauthors' names, the title of the paper or other item, and its location, specified by the publication abbreviation, year, month, and inclusive pagination. The Subject Index contains entries describing the item under all appropriate subject headings, plus the first author's name, the publication abbreviation, month, and year, and inclusive pages. Note that the item title is found only under the primary entry in the Author Index.

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Chen, Q., *see* Ma, X., *JBHI Dec. 2020 3443-3455*
Chen, R., Imani, F., and Yang, H., Heterogeneous Recurrence Analysis of Disease-Altered Spatiotemporal Patterns in Multi-Channel Cardiac Signals; *JBHI June 2020 1619-1631*
Chen, T., *see* Qian, X., *JBHI Dec. 2020 3539-3550*
Chen, W., *see* Zhong, L., *JBHI April 2020 1114-1124*
Chen, W., *see* Amini, A., *JBHI Oct. 2020 2731-2732*
Chen, W., Clifton, D., and Telfer, B., Guest Editorial: Integrative Sensor Networks, Informatics, and Modeling for Precision and Preventative Medicine; *JBHI July 2020 1858-1859*
Chen, W., *see* Wu, Y., *JBHI Aug. 2020 2144-2145*
Chen, W., *see* Mertes, G., *JBHI May 2020 1509-1518*
Chen, W., *see* Sun, C., *JBHI May 2020 1351-1366*
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Cheng, C., *see* Tsai, K., *JBHI Nov. 2020 3203-3214*
Cheng, J., Fu, H., Cabrera DeBuc, D., and Tian, J., Guest Editorial Ophthalmic Image Analysis and Informatics; *JBHI Dec. 2020 3335-3337*
Cheng, K., *see* Yang, X., *JBHI March 2020 855-865*
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Chesley, B., and Barbour, D.L., Visual Field Estimation by Probabilistic Classification; *JBHI Dec. 2020 3499-3506*
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Chitnis, P.V., *see* Guan, S., *JBHI Feb. 2020 568-576*
Choi, S.H., Kwon, H.B., Jin, H.W., Yoon, H., Lee, M.H., Lee, Y.J., and Park, K.S., Long Short-Term Memory Networks for Unconstrained Sleep Stage Classification Using Polyvinylidene Fluoride Film Sensor; *JBHI Dec. 2020 3606-3615*
Chon, K.H., *see* Bashar, S.K., *JBHI Nov. 2020 3124-3135*

Choo, K.R., *see* Yazdinejad, A., *JBHI Aug. 2020 2146-2156*
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Cinar, A., *see* Montaser, E., *JBHI July 2020 2064-2072*
Clemente, J., Li, F., Valero, M., and Song, W., Smart Seismic Sensing for Indoor Fall Detection, Location, and Notification; *JBHI Feb. 2020 524-532*
Clifford, T., *see* Kramer, J., *JBHI Nov. 2020 3136-3143*
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Cook, D.J., *see* Aminikhanghahi, S., *JBHI April 2020 1206-1214*
Cotton, F., *see* Stamile, C., *JBHI April 2020 1137-1148*
Coult, J., Blackwood, J., Rea, T.D., Kudenchuk, P.J., and Kwok, H., A Method to Detect Presence of Chest Compressions During Resuscitation Using Transthoracic Impedance; *JBHI March 2020 768-774*
Couto, F.M., *see* Fernandes, M., *JBHI March 2020 907-915*
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Cui, L., *see* Liao, W., *JBHI April 2020 984-993*
Cui, Z., *see* Zhang, S., *JBHI April 2020 965-973*
Cui, Z., Liu, J., Gao, Y., Zhu, R., and Yuan, S., LncRNA-Disease Associations Prediction Using Bipartite Local Model With Nearest Profile-Based Association Inferring; *JBHI May 2020 1519-1527*
Cunha, A., *see* Aresta, G., *JBHI Oct. 2020 2894-2901*
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D

da Cruz, L.B., Souza, J.C., de Paiva, A.C., de Almeida, J.D.S., Junior, G.B., Aires, K.R.T., Silva, A.C., and Gattass, M., Tear Film Classification in Interferometry Eye Images Using Phylogenetic Diversity Indexes and Ripley's K Function; *JBHI Dec. 2020 3491-3498*
da Ponte, D.F., *see* Speranza, C.G., *JBHI June 2020 1796-1804*
da Rocha, C.A.F., *see* Speranza, C.G., *JBHI June 2020 1796-1804*
Da Silva, L.S.C.B., and Oliveira, F.M.G.S., CRSIDLab: A Toolbox for Multivariate Autonomic Nervous System Analysis Using Cardiorespiratory Identification; *JBHI March 2020 728-734*
Dai, C., and Hu, X., Finger Joint Angle Estimation Based on Motoneuron Discharge Activities; *JBHI March 2020 760-767*
Dai, G., *see* Huang, J., *JBHI Jan. 2020 292-299*
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Damen, D., *see* Elkholy, A., *JBHI Jan. 2020 280-291*
Daniels, J., *see* Li, K., *JBHI Feb. 2020 603-613*
Daoud, S., Mdhaffar, A., Jmaiel, M., and Freisleben, B., Q-Rank: Reinforcement Learning for Recommending Algorithms to Predict Drug Sensitivity to Cancer Therapy; *JBHI Nov. 2020 3154-3161*
Darabi, S., Kachuee, M., Fazeli, S., and Sarrafzadeh, M., TAPER: Time-Aware Patient EHR Representation; *JBHI Nov. 2020 3268-3275*
Das, D., *see* Xian, X., *JBHI Oct. 2020 3029-3037*
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Datta, A., *see* Vundavilli, H., *JBHI Aug. 2020 2430-2438*
Dautov, R., and Tsouri, G.R., Dynamic Off-Body Rician Channel Modeling for Indoor Wireless Body Area Networks; *JBHI May 2020 1246-1254*
Davies, E., *see* Khaleghi, T., *JBHI July 2020 2107-2118*
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de Deus Lopes, R., *see* Jose, M.A., *JBHI Sept. 2020 2727*
de Figueiredo, R.P., Filho, J.B.F., Sousa, F.R.C., Weber, P., and Litchfield, I., Automated Verification of Care Pathways Using Constraint Programming; *JBHI Sept. 2020 2718-2725*
de Francisco, R., *see* Van Steenkiste, T., *JBHI Sept. 2020 2589-2598*
De Leon, P.L., *see* Martinez, M., *JBHI Jan. 2020 144-150*
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de Morree, H.M., *see* Eerikainen, L.M., *JBHI June 2020 1610-1618*
De Oliveira, H., Augusto, V., Jouaneton, B., Lamarsalle, L., Prodel, M., and Xie, X., Automatic and Explainable Labeling of Medical Event Logs With Autoencoding; *JBHI Nov. 2020 3076-3084*
de Paiva, A.C., *see* da Cruz, L.B., *JBHI Dec. 2020 3491-3498*
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De Vita, S., *see* Vukicevic, A.M., *JBHI March 2020 835-843*
de Vries, C.F., Staff, R.T., Waiter, G.D., Sokunbi, M.O., Sandu, A.L., and Murray, A.D., Motion During Acquisition is Associated With fMRI Brain Entropy; *JBHI Feb. 2020 586-593*
Decouchant, J., *see* Fernandes, M., *JBHI March 2020 907-915*
Deen, M.J., *see* Yang, G., *JBHI Sept. 2020 2442-2443*
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Demirer, M., *see* Dikici, E., *JBHI Oct. 2020 2883-2893*
Demrozi, F., Bacchin, R., Tamburin, S., Cristani, M., and Pravadelli, G., Toward a Wearable System for Predicting Freezing of Gait in People Affected by Parkinson's Disease; *JBHI Sept. 2020 2444-2451*
Deng, B., *see* Xue, B., *JBHI Feb. 2020 614-625*
Deng, R., *see* Wu, Y., *JBHI Aug. 2020 2144-2145*
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Dhaene, T., *see* Van Steenkiste, T., *JBHI Sept. 2020 2589-2598*
Di Camillo, B., Nicosia, G., Buffa, F., and Lo, B., Guest Editorial Data Science in Smart Healthcare: Challenges and Opportunities; *JBHI Nov. 2020 3041-3043*
Di Lazzaro, G., *see* Ricci, M., *JBHI Jan. 2020 120-130*
Diez, J., *see* Montaser, E., *JBHI July 2020 2064-2072*
Dikici, E., Ryu, J.L., Demirer, M., Bigelow, M., White, R.D., Slone, W., Erdal, B.S., and Prevedello, L.M., Automated Brain Metastases Detection Framework for T1-Weighted Contrast-Enhanced 3D MRI; *JBHI Oct. 2020 2883-2893*
Din, S.D., *see* Ullrich, M., *JBHI July 2020 1869-1878*
Ding, E., *see* Bashar, S.K., *JBHI Nov. 2020 3124-3135*
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Dobson, R., *see* Tissot, H.C., *JBHI Oct. 2020 2950-2959*
Domingues, I., Muller, H., Ortiz, A., Dasarathy, B.V., Abreu, P.H., and Calhoun, V.D., Guest Editorial: Information Fusion for Medical Data: Early, Late, and Deep Fusion Methods for Multimodal Data; *JBHI Jan. 2020 14-16*
Dong, B., *see* Dong, F., *JBHI July 2020 2082-2092*
Dong, D., *see* Li, C., *JBHI Dec. 2020 3585-3594*

Dong, D., *see* Meng, L., *JBHI Dec. 2020 3576-3584*
Dong, F., Qian, K., Ren, Z., Baird, A., Li, X., Dai, Z., Dong, B., Metze, F., Yamamoto, Y., and Schuller, B.W., Machine Listening for Heart Status Monitoring: Introducing and Benchmarking HSS—The Heart Sounds Shenzhen Corpus; *JBHI July 2020 2082-2092*
Dong, J., Liu, S., Liao, Y., Wen, H., Lei, B., Li, S., and Wang, T., A Generic Quality Control Framework for Fetal Ultrasound Cardiac Four-Chamber Planes; *JBHI April 2020 931-942*
Dong, J., *see* Hoogi, A., *JBHI Sept. 2020 2711-2717*
Dong, J., *see* Sun, Y., *JBHI Nov. 2020 3236-3247*
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Drumright, L.N., *see* Yoon, J., *JBHI Aug. 2020 2378-2388*
Du, J., Li, W., and Tan, H., Three-Layer Image Representation by an Enhanced Illumination-Based Image Fusion Method; *JBHI April 2020 1169-1179*
Du, J., *see* Teng, J., *JBHI Feb. 2020 354-364*
Du, Y., *see* Bridge, J., *JBHI Oct. 2020 2776-2786*
Duan, H., Sun, Z., Dong, W., He, K., and Huang, Z., On Clinical Event Prediction in Patient Treatment Trajectory Using Longitudinal Electronic Health Records; *JBHI July 2020 2053-2063*
Duce, B., *see* Korkalainen, H., *JBHI July 2020 2073-2081*
Duffy, D.C., Short Keynote Paper: Single Molecule Detection of Protein Biomarkers to Define the Continuum From Health to Disease; *JBHI July 2020 1864-1868*
Durbin, E.B., *see* Hasan, S., *JBHI July 2020 1952-1967*
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E Van Eyk, J., *see* Meng, Y., *JBHI March 2020 878-884*
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Echauz, J., *see* Baldassano, S.N., *JBHI Aug. 2020 2389-2397*
Edemacu, K., Jang, B., and Kim, J.W., Collaborative Ehealth Privacy and Security: An Access Control With Attribute Revocation Based on OBDD Access Structure; *JBHI Oct. 2020 2960-2972*
Eerikainen, L.M., Bonomi, A.G., Schipper, F., Dekker, L.R.C., de Morree, H.M., Vullings, R., and Aarts, R.M., Detecting Atrial Fibrillation and Atrial Flutter in Daily Life Using Photoplethysmography Data; *JBHI June 2020 1610-1618*
Eftestol, T., *see* Meinich-Bache, O., *JBHI March 2020 796-803*
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Eguchi, R., Yorozu, A., Fukumoto, T., and Takahashi, M., Estimation of Vertical Ground Reaction Force Using Low-Cost Insole With Force Plate-Free Learning From Single Leg Stance and Walking; *JBHI May 2020 1276-1283*
Ehgoetz Martens, K.A., *see* Hu, K., *JBHI April 2020 1215-1225*
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Eissa, M.R., *see* Zaitcev, A., *JBHI Oct. 2020 2932-2941*
Eissa, M.R., Good, T., Elliott, J., and Benaissa, M., Intelligent Data-Driven Model for Diabetes Diurnal Patterns Analysis; *JBHI Oct. 2020 2984-2992*
Elkholy, A., Hussein, M.E., Gomaa, W., Damen, D., and Saba, E., Efficient and Robust Skeleton-Based Quality Assessment and Abnormality Detection in Human Action Performance; *JBHI Jan. 2020 280-291*
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Fan, J., *see* Sun, C., *JBHI May 2020 1351-1366*
Fan, M., Yuan, W., Zhao, W., Xu, M., Wang, S., Gao, X., and Li, L., Joint Prediction of Breast Cancer Histological Grade and Ki-67 Expression Level Based on DCE-MRI and DWI Radiomics; *JBHI June 2020 1632-1642*
Fan, T.W., *see* Zhang, Y., *JBHI May 2020 1528-1536*
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Farrahi, V., Niemela, M., Tjurin, P., Kangas, M., Korpelainen, R., and Jamsa, T., Evaluating and Enhancing the Generalization Performance of Machine Learning Models for Physical Activity Intensity Prediction From Raw Acceleration Data; *JBHI Jan. 2020 27-38*
Fazeli, S., *see* Darabi, S., *JBHI Nov. 2020 3268-3275*
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Feng, Z., *see* Humayun, A.I., *JBHI Aug. 2020 2189-2198*
Fernandes, M., Decouchant, J., Volp, M., Couto, F.M., and Esteves-Verissimo, P., DNA-SeAl: Sensitivity Levels to Optimize the Performance of Privacy-Preserving DNA Alignment; *JBHI March 2020 907-915*
Fernandez-Bes, J., *see* Sampedro-Puente, D.A., *JBHI March 2020 693-704*
Fernandez-Luque, L., *see* Monteiro-Guerra, F., *JBHI June 2020 1738-1751*
Fernando, T., Ghaemmaghami, H., Denman, S., Sridharan, S., Hussain, N., and Fookes, C., Heart Sound Segmentation Using Bidirectional LSTMs With Attention; *JBHI June 2020 1601-1609*
Ferreira, C., *see* Aresta, G., *JBHI Oct. 2020 2894-2901*
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Freisleben, B., *see* Daoud, S., *JBHI Nov. 2020 3154-3161*
Fresard, M.E., Erices, R., Bravo, M.L., Cuello, M., Owen, G.I., Ibanez, C., and Rodriguez-Fernandez, M., Multi-Objective Optimization for Personalized

Prediction of Venous Thromboembolism in Ovarian Cancer Patients; *JBHI May 2020 1500-1508*
Frontoni, E., *see* Bernardini, M., *JBHI Jan. 2020 235-246*
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Fu, H., *see* Qian, X., *JBHI Dec. 2020 3539-3550*
Fu, H., *see* Cheng, J., *JBHI Dec. 2020 3335-3337*
Fu, J., *see* Mahmoud, S.S., *JBHI Nov. 2020 3191-3202*
Fu, K., *see* He, T., *JBHI June 2020 1762-1771*
Fu, Y., *see* Qian, X., *JBHI Dec. 2020 3539-3550*
Fukumoto, T., *see* Eguchi, R., *JBHI May 2020 1276-1283*

G

Gabbouj, M., *see* Zabihi, M., *JBHI Feb. 2020 543-555*
Gaboury, S., *see* Chapron, K., *JBHI Aug. 2020 2368-2377*
Gadhoumi, K., *see* Pereira, T., *JBHI March 2020 649-657*
Gahm, J.K., *see* Sarabi, M.S., *JBHI Dec. 2020 3466-3479*
Gallagher, M., *see* Hu, X., *JBHI May 2020 1447-1455*
Galvez, J.M., Castillo-Secilla, D., Herrera, L.J., Valenzuela, O., Caba, O., Prados, J.C., Ortuno, F.M., and Rojas, I., Towards Improving Skin Cancer Diagnosis by Integrating Microarray and RNA-Seq Datasets; *JBHI July 2020 2119-2130*
Gao, D., *see* Wu, X., *JBHI Dec. 2020 3480-3490*
Gao, F., Wu, T., Chu, X., Yoon, H., Xu, Y., and Patel, B., Deep Residual Inception Encoder–Decoder Network for Medical Imaging Synthesis; *JBHI Jan. 2020 39-49*
Gao, P., *see* Zhang, X., *JBHI Sept. 2020 2663-2670*
Gao, W., *see* Sun, L., *JBHI Oct. 2020 2798-2805*
Gao, X., *see* Fan, M., *JBHI June 2020 1632-1642*
Gao, X., *see* Sun, Y., *JBHI Nov. 2020 3236-3247*
Gao, X., *see* Xue, X., *JBHI Feb. 2020 377-386*
Gao, Y., *see* Wu, M., *JBHI June 2020 1823-1834*
Gao, Y., Zhang, Y., Cao, Z., Guo, X., and Zhang, J., Decoding Brain States From fMRI Signals by Using Unsupervised Domain Adaptation; *JBHI June 2020 1677-1685*
Gao, Y., *see* Jiao, C., *JBHI Oct. 2020 3002-3011*
Gao, Y., *see* Sun, L., *JBHI Oct. 2020 2798-2805*
Gao, Y., *see* Yang, W., *JBHI Aug. 2020 2278-2291*
Gao, Y., *see* Cui, Z., *JBHI May 2020 1519-1527*
Garcia-Villanova, P., *see* Tabik, S., *JBHI Dec. 2020 3595-3605*
Garelli, F., *see* Moscoso-Vasquez, M., *JBHI Sept. 2020 2681-2689*
Garmendia-Leiza, J.R., *see* Amado-Caballero, P., *JBHI Sept. 2020 2690-2700*
Garnavi, R., *see* George, Y., *JBHI Dec. 2020 3421-3430*
Garnavi, R., *see* George, Y., *JBHI Feb. 2020 577-585*
Gasner, H., *see* Ullrich, M., *JBHI July 2020 1869-1878*
Gassner, H., *see* Martindale, C.F., *JBHI May 2020 1490-1499*
Gattass, M., *see* da Cruz, L.B., *JBHI Dec. 2020 3491-3498*
Ge, Z., *see* Gu, Y., *JBHI May 2020 1379-1393*
Gelfand, M., *see* Baldassano, S.N., *JBHI Aug. 2020 2389-2397*
Geng, P., *see* Zhang, X., *JBHI Sept. 2020 2663-2670*
George, Y., Antony, B.J., Ishikawa, H., Wollstein, G., Schuman, J.S., and Garnavi, R., Attention-Guided 3D-CNN Framework for Glaucoma Detection and Structural-Functional Association Using Volumetric Images; *JBHI Dec. 2020 3421-3430*
George, Y., Aldeen, M., and Garnavi, R., Automatic Scale Severity Assessment Method in Psoriasis Skin Images Using Local Descriptors; *JBHI Feb. 2020 577-585*
Georgiou, P., *see* Guemes, A., *JBHI May 2020 1439-1446*
Georgiou, P., *see* Li, K., *JBHI Feb. 2020 414-423*
Georgiou, P., *see* Li, K., *JBHI Feb. 2020 603-613*
Gerard, O., *see* Andreassen, B.S., *JBHI April 2020 994-1003*
Ghaemmaghami, H., *see* Fernando, T., *JBHI June 2020 1601-1609*
Ghaffarzadegan, S., *see* Humayun, A.I., *JBHI Aug. 2020 2189-2198*
Ghafoor, K.Z., *see* Hosseini, E., *JBHI Oct. 2020 2765-2775*
Ghasemi, Z., *see* Yao, Y., *JBHI Jan. 2020 69-78*
Ghasemzadeh, H., *see* Aygun, A., *JBHI Aug. 2020 2238-2250*
Ghoraani, B., Hssayeni, M.D., Bruack, M.M., and Jimenez-Shahed, J., Multilevel Features for Sensor-Based Assessment of Motor Fluctuation in Parkinson's Disease Subjects; *JBHI May 2020 1284-1295*
Giannini, F., *see* Ricci, M., *JBHI Jan. 2020 120-130*
Gimenez, F., *see* Hoogi, A., *JBHI Sept. 2020 2711-2717*
Gispert, J.D., *see* Casamitjana, A., *JBHI Feb. 2020 365-376*
Gkoulalas-Divanis, A., *see* Ranchal, R., *JBHI Nov. 2020 3182-3188*
Goldenberg, L., *see* Karimi, D., *JBHI May 2020 1413-1426*
Golemati, S., *see* Panayides, A.S., *JBHI July 2020 1837-1857*
Gomaa, W., *see* Elkholy, A., *JBHI Jan. 2020 280-291*
Gomez-Rios, A., *see* Tabik, S., *JBHI Dec. 2020 3595-3605*
Gong, K., *see* Wu, D., *JBHI Dec. 2020 3529-3538*
Gong, W., *see* Li, C., *JBHI Dec. 2020 3585-3594*
Gonzalez-Garcia, J., Telleria-Orriols, C., Estupinan-Romero, F., and Bernal-Delgado, E., Construction of Empirical Care Pathways Process Models From Multiple Real-World Datasets; *JBHI Sept. 2020 2671-2680*
Good, T., *see* Zaitcev, A., *JBHI Oct. 2020 2932-2941*
Good, T., *see* Eissa, M.R., *JBHI Oct. 2020 2984-2992*
Gordon, C., *see* Qu, W., *JBHI Oct. 2020 2833-2843*
Gorriz, J., *see* Martinez-Murcia, F.J., *JBHI Jan. 2020 17-26*
Gossmann, A., *see* Kassani, P.H., *JBHI Feb. 2020 336-344*
Greenspan, H., *see* Sun, L., *JBHI Aug. 2020 2303-2314*
Groenendaal, W., *see* Van Steenkiste, T., *JBHI Sept. 2020 2589-2598*
Grunstein, R., *see* Qu, W., *JBHI Oct. 2020 2833-2843*
Gu, P., *see* Hu, S., *JBHI Oct. 2020 3020-3028*
Gu, X., *see* Mahmoud, S.S., *JBHI Nov. 2020 3191-3202*
Gu, Y., Ge, Z., Bonnington, C.P., and Zhou, J., Progressive Transfer Learning and Adversarial Domain Adaptation for Cross-Domain Skin Disease Classification; *JBHI May 2020 1379-1393*
Guan, S., Khan, A.A., Sikdar, S., and Chitnis, P.V., Fully Dense UNet for 2-D Sparse Photoacoustic Tomography Artifact Removal; *JBHI Feb. 2020 568-576*
Guan, Y., *see* Xu, X., *JBHI Feb. 2020 556-567*
Guemes, A., Cappon, G., Hernandez, B., Reddy, M., Oliver, N., Georgiou, P., and Herrero, P., Predicting Quality of Overnight Glycaemic Control in Type 1 Diabetes Using Binary Classifiers; *JBHI May 2020 1439-1446*
Guerri, D., *see* Macis, S., *JBHI Jan. 2020 268-279*
Guigou, C., *see* Hussain, R., *JBHI July 2020 2093-2106*
Guirado, E., *see* Tabik, S., *JBHI Dec. 2020 3595-3605*
Guizani, M., *see* Hosseini, E., *JBHI Oct. 2020 2765-2775*
Guo, F., *see* Zhao, R., *JBHI April 2020 1104-1113*
Guo, F., *see* Li, J., *JBHI Oct. 2020 3012-3019*
Guo, H., Kruger, U., Wang, G., Kalra, M.K., and Yan, P., Knowledge-Based Analysis for Mortality Prediction From CT Images; *JBHI Feb. 2020 457-464*
Guo, J., *see* He, T., *JBHI June 2020 1762-1771*
Guo, J., Huang, X., Pandey, S., and Zhang, Y., Guest Editorial: Internet of Medical Things for Health Engineering; *JBHI June 2020 1539-1540*
Guo, J., *see* Xu, Q., *JBHI Sept. 2020 2481-2489*
Guo, N., *see* Ying, J., *JBHI June 2020 1805-1813*
Guo, R., *see* Hu, X., *JBHI Sept. 2020 2599-2608*
Guo, X., *see* Gao, Y., *JBHI June 2020 1677-1685*
Guo, X., Wang, H., Lu, X., Hu, X., Che, S., and Lu, Y., Robust Fovea Localization Based on Symmetry Measure; *JBHI Aug. 2020 2315-2326*
Guo, Y., *see* Zhou, Z., *JBHI April 2020 943-956*
Guo, Y., *see* Zhang, Z., *JBHI Jan. 2020 300-310*
Guo, Y., *see* Zhang, Y., *JBHI Feb. 2020 465-474*
Gurel, N.Z., Wittbrodt, M.T., Jung, H., Ladd, S.L., Shah, A.J., Vaccarino, V., Bremner, J.D., and Inan, O.T., Automatic Detection of Target Engagement in Transcutaneous Cervical Vagal Nerve Stimulation for Traumatic Stress Triggers; *JBHI July 2020 1917-1925*
Gurve, D., and Krishnan, S., Separation of Fetal-ECG From Single-Channel Abdominal ECG Using Activation Scaled Non-Negative Matrix Factorization; *JBHI March 2020 669-680*
Gyobu, T., *see* Xu, R., *JBHI July 2020 2041-2052*

H

Hahn, J., *see* Yao, Y., *JBHI Jan. 2020 69-78*

Hahn, J.K., *see* Lu, Y., *JBHI Jan. 2020 205-213*

Hallez, H., *see* Mertes, G., *JBHI May 2020 1509-1518*

Hamad, R.A., Hidalgo, A.S., Bouguelia, M., Estevez, M.E., and Quero, J.M., Efficient Activity Recognition in Smart Homes Using Delayed Fuzzy Temporal Windows on Binary Sensors; *JBHI Feb. 2020 387-395*

Han, J., *see* Zhang, Z., *JBHI Jan. 2020 300-310*

Han, J.J., *see* Matthew, R.P., *JBHI Nov. 2020 3285-3294*

Han, X., *see* Peng, L., *JBHI Aug. 2020 2327-2336*

Han, Y., *see* Liu, J., *JBHI Dec. 2020 3520-3528*

Hannink, J., *see* Ullrich, M., *JBHI July 2020 1869-1878*

Hao, D., Zhang, L., Sumkin, J., Mohamed, A., and Wu, S., Inaccurate Labels in Weakly-Supervised Deep Learning: Automatic Identification and Correction and Their Impact on Classification Performance; *JBHI Sept. 2020 2701-2710*

Hao, J., *see* Liao, W., *JBHI April 2020 984-993*

Harati, S., Crowell, A., Huang, Y., Mayberg, H., and Nemati, S., Classifying Depression Severity in Recovery From Major Depressive Disorder via Dynamic Facial Features; *JBHI March 2020 815-824*

Harding, P., *see* Loram, I., *JBHI April 2020 1016-1027*

Harris, S., *see* Tissot, H.C., *JBHI Oct. 2020 2950-2959*

Hasan, S., Rivera, D., Wu, X., Durbin, E.B., Christian, J.B., and Tourassi, G., Knowledge Graph-Enabled Cancer Data Analytics; *JBHI July 2020 1952-1967*

Hasan, T., *see* Humayun, A.I., *JBHI Aug. 2020 2189-2198*

Hasanuzzaman, M., *see* Mitra, S., *JBHI Nov. 2020 3315-3325*

Hashemi, M., *see* Saadatnejad, S., *JBHI Feb. 2020 515-523*

Hashimoto, Y., *see* Meng, Q., *JBHI Dec. 2020 3351-3361*

Haytham, A., *see* Wang, D., *JBHI Dec. 2020 3384-3396*

He, J., Wang, C., Jiang, D., Li, Z., Liu, Y., and Zhang, T., CycleGAN With an Improved Loss Function for Cell Detection Using Partly Labeled Images; *JBHI Sept. 2020 2473-2480*

He, J., *see* Zhang, Y., *JBHI Jan. 2020 171-179*

He, J., *see* Liu, W., *JBHI Feb. 2020 503-514*

He, K., *see* Duan, H., *JBHI July 2020 2053-2063*

He, P., *see* Liao, W., *JBHI April 2020 984-993*

He, Q., *see* Miao, F., *JBHI Jan. 2020 79-91*

He, T., Guo, J., Chen, N., Xu, X., Wang, Z., Fu, K., Liu, L., and Yi, Z., MediMLP: Using Grad-CAM to Extract Crucial Variables for Lung Cancer Postoperative Complication Prediction; *JBHI June 2020 1762-1771*

He, W., Ye, Y., Lu, L., Cheng, Y., Li, Y., and Wang, Z., Robust Heart Rate Monitoring for Quasi-Periodic Motions by Wrist-Type PPG Signals; *JBHI March 2020 636-648*

He, X., *see* Zhu, H., *JBHI June 2020 1652-1663*

He, Y., Jiao, W., Shi, Y., Lian, J., Zhao, B., Zou, W., Zhu, Y., and Zheng, Y., Segmenting Diabetic Retinopathy Lesions in Multispectral Images Using Low-Dimensional Spatial-Spectral Matrix Representation; *JBHI Feb. 2020 493-502*

He, Z., *see* Liao, W., *JBHI May 2020 1405-1412*

Heldt, T., *see* Jaishankar, R., *JBHI Aug. 2020 2398-2406*

Heldt, T., *see* Lai, H., *JBHI March 2020 885-897*

Heng, P., *see* Wang, X., *JBHI Dec. 2020 3431-3442*

Heretik, A., *see* Kacur, J., *JBHI Nov. 2020 3055-3065*

Hernandez, B., *see* Guemes, A., *JBHI May 2020 1439-1446*

Hernandez, M.E., *see* Hua, A., *JBHI Sept. 2020 2452-2460*

Hernandez-Matas, C., Zabulis, X., and Argyros, A.A., REMPE: Registration of Retinal Images Through Eye Modelling and Pose Estimation; *JBHI Dec. 2020 3362-3373*

Herrera, F., *see* Tabik, S., *JBHI Dec. 2020 3595-3605*

Herrera, L.J., *see* Galvez, J.M., *JBHI July 2020 2119-2130*

Herrero, P., *see* Guemes, A., *JBHI May 2020 1439-1446*

Herrero, P., *see* Li, K., *JBHI Feb. 2020 414-423*

Herrero, P., *see* Li, K., *JBHI Feb. 2020 603-613*

Hersek, S., *see* Zia, J., *JBHI April 2020 1080-1092*

Hersek, S., *see* Zia, J., *JBHI July 2020 1887-1898*

Hersek, S., *see* Semiz, B., *JBHI July 2020 1899-1906*

Hersek, S., Semiz, B., Shandhi, M.M.H., Orlandic, L., and Inan, O.T., A Globalized Model for Mapping Wearable Seismocardiogram Signals to Whole-Body Ballistocardiogram Signals Based on Deep Learning; *JBHI May 2020 1296-1309*

Herskovic, V., *see* Saint-Pierre, C., *JBHI Jan. 2020 319-329*

Hicks, Y.A., *see* Azzopardi, C., *JBHI April 2020 1004-1015*

Hidalgo, A.S., *see* Hamad, R.A., *JBHI Feb. 2020 387-395*

Hill, C.E., *see* Baldassano, S.N., *JBHI Aug. 2020 2389-2397*

Hirano, Y., *see* Xu, R., *JBHI July 2020 2041-2052*

Hocevar, A., *see* Vukicevic, A.M., *JBHI March 2020 835-843*

Holsapple, J., *see* Jaishankar, R., *JBHI Aug. 2020 2398-2406*

Homayounieh, F., *see* Wu, D., *JBHI Dec. 2020 3529-3538*

Honda, O., *see* Xu, R., *JBHI July 2020 2041-2052*

Hong, H., *see* Qu, W., *JBHI Oct. 2020 2833-2843*

Hong, H., *see* Xue, B., *JBHI Feb. 2020 614-625*

Hoog Antink, C., Mai, Y., Aalto, R., Bruser, C., Leonhardt, S., Oksala, N., and Vehkaoja, A., Ballistocardiography Can Estimate Beat-to-Beat Heart Rate Accurately at Night in Patients After Vascular Intervention; *JBHI Aug. 2020 2230-2237*

Hoogi, A., Mishra, A., Gimenez, F., Dong, J., and Rubin, D., Natural Language Generation Model for Mammography Reports Simulation; *JBHI Sept. 2020 2711-2717*

Hossain, M.B., *see* Bashar, S.K., *JBHI Nov. 2020 3124-3135*

Hossain, M.R., *see* Whaiduzzaman, M., *JBHI Dec. 2020 3564-3575*

Hosseini, E., Ghafoor, K.Z., Sadiq, A.S., Guizani, M., and Emrouznejad, A., COVID-19 Optimizer Algorithm, Modeling and Controlling of Coronavirus Distribution Process; *JBHI Oct. 2020 2765-2775*

Hou, S., *see* Ye, Y., *JBHI Oct. 2020 2755-2764*

Houghten, S., *see* Hughes, J.A., *JBHI Nov. 2020 3103-3110*

Hssayeni, M.D., *see* Ghoraani, B., *JBHI May 2020 1284-1295*

Hu, C., *see* Ying, J., *JBHI June 2020 1805-1813*

Hu, D., Wu, Z., Lin, W., Li, G., and Shen, D., Hierarchical Rough-to-Fine Model for Infant Age Prediction Based on Cortical Features; *JBHI Jan. 2020 214-225*

Hu, H., *see* Huang, Q., *JBHI Oct. 2020 2860-2869*

Hu, H., *see* Peng, L., *JBHI Aug. 2020 2327-2336*

Hu, K., Wang, Z., Mei, S., Ehgoetz Martens, K.A., Yao, T., Lewis, S.J.G., and Feng, D.D., Vision-Based Freezing of Gait Detection With Anatomic Directed Graph Representation; *JBHI April 2020 1215-1225*

Hu, S., Chen, P., Gu, P., and Wang, B., A Deep Learning-Based Chemical System for QSAR Prediction; *JBHI Oct. 2020 3020-3028*

Hu, X., Guo, R., Chen, J., Li, H., Waldmannstetter, D., Zhao, Y., Li, B., Shi, K., and Menze, B., Coarse-to-Fine Adversarial Networks and Zone-Based Uncertainty Analysis for NK/T-Cell Lymphoma Segmentation in CT/PET Images; *JBHI Sept. 2020 2599-2608*

Hu, X., *see* Bi, X., *JBHI Oct. 2020 2973-2983*

Hu, X., *see* Guo, X., *JBHI Aug. 2020 2315-2326*

Hu, X., *see* Dai, C., *JBHI March 2020 760-767*

Hu, X., *see* Pereira, T., *JBHI March 2020 649-657*

Hu, X., Gallagher, M., Loveday, W., Dev, A., and Connor, J.P., Network Analysis and Visualisation of Opioid Prescribing Data; *JBHI May 2020 1447-1455*

Hu, Y., *see* Qin, P., *JBHI April 2020 1028-1036*

Hu, Y., *see* Sung, S., *JBHI Oct. 2020 2922-2931*

Hu, Y., *see* Zhang, H., *JBHI Dec. 2020 3408-3420*

Hu, Z., *see* Li, C., *JBHI Dec. 2020 3585-3594*

Hua, A., Chaudhari, P., Johnson, N., Quinton, J., Schatz, B., Buchner, D., and Hernandez, M.E., Evaluation of Machine Learning Models for Classifying Upper Extremity Exercises Using Inertial Measurement Unit-Based Kinematic Data; *JBHI Sept. 2020 2452-2460*

Hua, J., *see* Vundavilli, H., *JBHI Aug. 2020 2430-2438*

Huan, Y., *see* Liu, L., *JBHI March 2020 898-906*

Huang, J., *see* Yao, J., *JBHI June 2020 1550-1556*

Huang, J., Zhu, Q., Wang, M., Zhou, L., Zhang, Z., and Zhang, D., Coherent Pattern in Multi-Layer Brain Networks: Application to Epilepsy Identification; *JBHI Sept. 2020 2609-2620*

Huang, J., *see* Huang, Q., *JBHI Oct. 2020 2860-2869*

Huang, J., Lin, S., Wang, N., Dai, G., Xie, Y., and Zhou, J., TSE-CNN: A Two-Stage End-to-End CNN for Human Activity Recognition; *JBHI Jan. 2020 292-299*
Huang, K., *see* Panayides, A.S., *JBHI July 2020 1837-1857*
Huang, L., *see* Teng, F., *JBHI Sept. 2020 2506-2515*
Huang, Q., Pan, F., Li, W., Yuan, F., Hu, H., Huang, J., Yu, J., and Wang, W., Differential Diagnosis of Atypical Hepatocellular Carcinoma in Contrast-Enhanced Ultrasound Using Spatio-Temporal Diagnostic Semantics; *JBHI Oct. 2020 2860-2869*
Huang, Q., Li, W., Zhang, B., Li, Q., Tao, R., and Lovell, N.H., Blood Cell Classification Based on Hyperspectral Imaging With Modulated Gabor and CNN; *JBHI Jan. 2020 160-170*
Huang, Q., *see* Liu, W., *JBHI Feb. 2020 503-514*
Huang, S., *see* Cai, S., *JBHI Sept. 2020 2630-2638*
Huang, S., *see* Jelodar, H., *JBHI Oct. 2020 2733-2742*
Huang, X., *see* Zhou, H., *JBHI June 2020 1541-1549*
Huang, X., *see* Guo, J., *JBHI June 2020 1539-1540*
Huang, Y., *see* Wen, X., *JBHI April 2020 1093-1103*
Huang, Y., *see* Sun, L., *JBHI Aug. 2020 2303-2314*
Huang, Y., *see* Harati, S., *JBHI March 2020 815-824*
Huang, Z., *see* Duan, H., *JBHI July 2020 2053-2063*
Hughes, J.A., Houghten, S., and Brown, J.A., Models of Parkinson's Disease Patient Gait; *JBHI Nov. 2020 3103-3110*
Hui, Z., *see* Zaitcev, A., *JBHI Oct. 2020 2932-2941*
Humayun, A.I., Ghaffarzadegan, S., Ansari, M.I., Feng, Z., and Hasan, T., Towards Domain Invariant Heart Sound Abnormality Detection Using Learnable Filterbanks; *JBHI Aug. 2020 2189-2198*
Hung, C., *see* Cao, H., *JBHI July 2020 2006-2015*
Hussain, A., *see* Ren, J., *JBHI Dec. 2020 3551-3563*
Hussain, H., *see* Noman, F., *JBHI March 2020 705-716*
Hussain, H., *see* Phang, C., *JBHI May 2020 1333-1343*
Hussain, N., *see* Fernando, T., *JBHI June 2020 1601-1609*
Hussain, R., Lalande, A., Guigou, C., and Bozorg-Grayeli, A., Contribution of Augmented Reality to Minimally Invasive Computer-Assisted Cranial Base Surgery; *JBHI July 2020 2093-2106*
Hussain, Z., *see* Ren, J., *JBHI Dec. 2020 3551-3563*
Hussein, M.E., *see* Elkholy, A., *JBHI Jan. 2020 280-291*

I

Ibanez, C., *see* Fresard, M.E., *JBHI May 2020 1500-1508*
Ibragimov, B., *see* Kuzdeuov, A., *JBHI Oct. 2020 2743-2754*
Idris, A.H., *see* Jaureguibeitia, X., *JBHI Sept. 2020 2580-2588*
Ikram, M.A., *see* Achterberg, H.C., *JBHI March 2020 825-834*
Imani, F., *see* Chen, R., *JBHI June 2020 1619-1631*
Inan, O.T., *see* Zia, J., *JBHI April 2020 1080-1092*
Inan, O.T., *see* Yao, Y., *JBHI Jan. 2020 69-78*
Inan, O.T., *see* Zia, J., *JBHI July 2020 1887-1898*
Inan, O.T., *see* Semiz, B., *JBHI July 2020 1899-1906*
Inan, O.T., *see* Gurel, N.Z., *JBHI July 2020 1917-1925*
Inan, O.T., *see* Hersek, S., *JBHI May 2020 1296-1309*
Irusta, U., *see* Jaureguibeitia, X., *JBHI Sept. 2020 2580-2588*
Ishikawa, H., *see* George, Y., *JBHI Dec. 2020 3421-3430*
Iwamoto, Y., *see* Peng, L., *JBHI Aug. 2020 2327-2336*

J

Jaeger, S., *see* Yang, F., *JBHI May 2020 1427-1438*
Jafari, R., *see* Akbari, A., *JBHI Sept. 2020 2639-2650*
Jafari, R., *see* Aygun, A., *JBHI Aug. 2020 2238-2250*
Jaishankar, R., Fanelli, A., Filippidis, A., Vu, T., Holsapple, J., and Heldt, T., A Spectral Approach to Model-Based Noninvasive Intracranial Pressure Estimation; *JBHI Aug. 2020 2398-2406*
Jalali, A., and Lee, M., Atrial Fibrillation Prediction With Residual Network Using Sensitivity and Orthogonality Constraints; *JBHI Feb. 2020 407-413*
Jamal Deen, M., *see* Yang, G., *JBHI Sept. 2020 2535-2549*
Jamsa, T., *see* Farrahi, V., *JBHI Jan. 2020 27-38*
Jang, B., *see* Edemacu, K., *JBHI Oct. 2020 2960-2972*
Janott, C., *see* Zhang, Z., *JBHI Jan. 2020 300-310*
Jantti, V., *see* Zabihi, M., *JBHI Feb. 2020 543-555*
Jarrett, D., Yoon, J., and van der Schaar, M., Dynamic Prediction in Clinical Survival Analysis Using Temporal Convolutional Networks; *JBHI Feb. 2020 424-436*
Jaureguibeitia, X., Irusta, U., Aramendi, E., Owens, P.C., Wang, H.E., and Idris, A.H., Automatic Detection of Ventilations During Mechanical Cardiopulmonary Resuscitation; *JBHI Sept. 2020 2580-2588*
Javed, H., *see* Tadesse, G.A., *JBHI July 2020 2131-2141*
Jelodar, H., Wang, Y., Orji, R., and Huang, S., Deep Sentiment Classification and Topic Discovery on Novel Coronavirus or COVID-19 Online Discussions: NLP Using LSTM Recurrent Neural Network Approach; *JBHI Oct. 2020 2733-2742*
Ji, J., *see* Liu, J., *JBHI July 2020 2028-2040*
Ji, Z., *see* Okuwobi, I.P., *JBHI April 2020 1125-1136*
Ji, Z., *see* Ma, X., *JBHI Dec. 2020 3443-3455*
Jia, H., *see* Wang, H., *JBHI Feb. 2020 475-485*
Jia, J., *see* Yao, J., *JBHI June 2020 1550-1556*
Jia, J., *see* Mertes, G., *JBHI May 2020 1509-1518*
Jia, X., *see* Zhang, S., *JBHI April 2020 965-973*
Jia, X., *see* Liu, J., *JBHI July 2020 2028-2040*
Jian, D., *see* Zhang, D., *JBHI Sept. 2020 2570-2579*
Jiang, D., *see* He, J., *JBHI Sept. 2020 2473-2480*
Jiang, H., *see* Sun, L., *JBHI Oct. 2020 2798-2805*
Jiang, H., Yang, M., Chen, X., Li, M., Li, Y., and Wang, J., miRTMC: A miRNA Target Prediction Method Based on Matrix Completion Algorithm; *JBHI Dec. 2020 3630-3641*
Jiang, S., *see* Zhou, Z., *JBHI Jan. 2020 194-204*
Jiang, X., *see* Zhou, Z., *JBHI April 2020 943-956*
Jiang, Y., *see* Yu, R., *JBHI Feb. 2020 486-492*
Jiao, C., Gao, Y., Yu, N., Liu, J., and Qi, L., Hyper-Graph Regularized Constrained NMF for Selecting Differentially Expressed Genes and Tumor Classification; *JBHI Oct. 2020 3002-3011*
Jiao, W., *see* He, Y., *JBHI Feb. 2020 493-502*
Jiao, Z., *see* Xue, X., *JBHI Feb. 2020 377-386*
Jimenez-Shahed, J., *see* Ghoraani, B., *JBHI May 2020 1284-1295*
Jin, H.W., *see* Choi, S.H., *JBHI Dec. 2020 3606-3615*
Jin, R., *see* Cao, H., *JBHI July 2020 2006-2015*
Jin, Z., *see* Wu, X., *JBHI Dec. 2020 3480-3490*
Jmaiel, M., *see* Daoud, S., *JBHI Nov. 2020 3154-3161*
Johnson, N., *see* Hua, A., *JBHI Sept. 2020 2452-2460*
Jones, T.W., *see* Ngo, C.Q., *JBHI May 2020 1237-1245*
Jose, M.A., and de Deus Lopes, R., Corrections to "Human–Computer Interface Controlled by the Lip" *JBHI Sept. 2020 2727*
Joshi, R., Kommers, D., Oosterwijk, L., Feijs, L., van Pul, C., and Andriessen, P., Predicting Neonatal Sepsis Using Features of Heart Rate Variability, Respiratory Characteristics, and ECG-Derived Estimates of Infant Motion; *JBHI March 2020 681-692*
Jouaneton, B., *see* De Oliveira, H., *JBHI Nov. 2020 3076-3084*
Joung, S., *see* Meng, Y., *JBHI March 2020 878-884*
Ju, M., *see* Ye, Y., *JBHI Oct. 2020 2755-2764*
Ju, Y., *see* Zhang, Y., *JBHI Sept. 2020 2621-2629*
Juarez, M.A., *see* Viceconti, M., *JBHI Jan. 2020 4-13*
Jung, H., *see* Gurel, N.Z., *JBHI July 2020 1917-1925*
Junior, G.B., *see* da Cruz, L.B., *JBHI Dec. 2020 3491-3498*

K

Kachuee, M., *see* Darabi, S., *JBHI Nov. 2020 3268-3275*
Kacur, J., Polec, J., Smolejova, E., and Heretik, A., An Analysis of Eye-Tracking Features and Modelling Methods for Free-Viewed Standard Stimulus: Application for Schizophrenia Detection; *JBHI Nov. 2020 3055-3065*
Kaddoum, G., *see* Matar, G., *JBHI Jan. 2020 101-110*
Kainulainen, S., *see* Korkalainen, H., *JBHI July 2020 2073-2081*
Kalamaras, I., *see* Zacharaki, E.I., *JBHI June 2020 1557-1568*
Kalogiannis, S., *see* Zacharaki, E.I., *JBHI June 2020 1557-1568*

Kalra, M.K., *see* Wu, D., *JBHI Dec. 2020 3529-3538*
Kalra, M.K., *see* Guo, H., *JBHI Feb. 2020 457-464*
Kamnardsiri, T., *see* Silsupadol, P., *JBHI April 2020 1188-1195*
Kang, M.K., *see* Wu, D., *JBHI Dec. 2020 3529-3538*
Kangas, M., *see* Farrahi, V., *JBHI Jan. 2020 27-38*
Kanik, S.D., *see* Torkamani-Azar, M., *JBHI Sept. 2020 2550-2558*
Kansara, K., *see* Acharya, S., *JBHI June 2020 1717-1726*
Kansara, K., *see* Acharya, S., *JBHI Sept. 2020 2726*
Kanwar, M., *see* Movahedi, F., *JBHI Aug. 2020 2347-2358*
Karabay, A., *see* Kuzdeuov, A., *JBHI Oct. 2020 2743-2754*
Karimi, D., Nir, G., Fazli, L., Black, P.C., Goldenberg, L., and Salcudean, S.E., Deep Learning-Based Gleason Grading of Prostate Cancer From Histopathology Images—Role of Multiscale Decision Aggregation and Data Augmentation; *JBHI May 2020 1413-1426*
Karvela, M., *see* Liu, X., *JBHI Nov. 2020 3276-3284*
Kashani, A.H., *see* Sarabi, M.S., *JBHI Dec. 2020 3466-3479*
Kassani, P.H., Gossmann, A., and Wang, Y., Multimodal Sparse Classifier for Adolescent Brain Age Prediction; *JBHI Feb. 2020 336-344*
Kate, W.t., *see* Lueken, M., *JBHI July 2020 1879-1886*
Kavehei, O., *see* Liu, T., *JBHI Oct. 2020 2844-2851*
Kawata, Y., *see* Xu, R., *JBHI July 2020 2041-2052*
Kaye, M.E., *see* Savoie, P., *JBHI April 2020 1196-1205*
Ke, G., *see* Luo, Y., *JBHI Dec. 2020 3374-3383*
Keenan, K.J., *see* Pereira, T., *JBHI March 2020 649-657*
Khaleghi, T., Murat, A., Arslanturk, S., and Davies, E., Automated Surgical Term Clustering: A Text Mining Approach for Unstructured Textual Surgery Descriptions; *JBHI July 2020 2107-2118*
Khalifa, Y.M., *see* Temel, D., *JBHI March 2020 788-795*
Khan, A.A., *see* Guan, S., *JBHI Feb. 2020 568-576*
Khansari, M.M., *see* Sarabi, M.S., *JBHI Dec. 2020 3466-3479*
Khatibi, T., *see* Nakhaei, A., *JBHI Nov. 2020 3295-3307*
Kidanto, H., *see* Meinich-Bache, O., *JBHI March 2020 796-803*
Kidanto, H., *see* Meinich-Bache, O., *JBHI Nov. 2020 3258-3267*
Kido, S., *see* Xu, R., *JBHI July 2020 2041-2052*
Kim, B., *see* Lee, J., *JBHI May 2020 1265-1275*
Kim, J.W., *see* Edemacu, K., *JBHI Oct. 2020 2960-2972*
Kim, K., *see* Wu, D., *JBHI Dec. 2020 3529-3538*
Kimball, J., *see* Zia, J., *JBHI April 2020 1080-1092*
Kimball, J., *see* Zia, J., *JBHI July 2020 1887-1898*
Kiranyaz, S., *see* Zabihi, M., *JBHI Feb. 2020 543-555*
Kiyasseh, D., Tadesse, G.A., Nhan, L.N.T., Van Tan, L., Thwaites, L., Zhu, T., and Clifton, D., PlethAugment: GAN-Based PPG Augmentation for Medical Diagnosis in Low-Resource Settings; *JBHI Nov. 2020 3226-3235*
Klein, L., *see* Semiz, B., *JBHI July 2020 1899-1906*
Klerkx, S., *see* Van Steenkiste, T., *JBHI Sept. 2020 2589-2598*
Klingelhoefer, L., *see* Papadopoulos, A., *JBHI Sept. 2020 2559-2569*
Klucken, J., *see* Ullrich, M., *JBHI July 2020 1869-1878*
Kluge, F., *see* Ullrich, M., *JBHI July 2020 1869-1878*
Kobylecki, C., *see* Loram, I., *JBHI April 2020 1016-1027*
Kohl, Z., *see* Martindale, C.F., *JBHI May 2020 1490-1499*
Kolar, G., *see* Sacco, A., *JBHI Sept. 2020 2523-2534*
Kolle, K., Biester, T., Christiansen, S., Fougner, A.L., and Stavdahl, O., Pattern Recognition Reveals Characteristic Postprandial Glucose Changes: Non-Individualized Meal Detection in Diabetes Mellitus Type 1; *JBHI Feb. 2020 594-602*
Kommers, D., *see* Joshi, R., *JBHI March 2020 681-692*
Korkalainen, H., Aakko, J., Nikkonen, S., Kainulainen, S., Leino, A., Duce, B., Afara, I.O., Myllymaa, S., Toyras, J., and Leppanen, T., Accurate Deep Learning-Based Sleep Staging in a Clinical Population With Suspected Obstructive Sleep Apnea; *JBHI July 2020 2073-2081*
Kormos, R.L., *see* Movahedi, F., *JBHI Aug. 2020 2347-2358*
Korpelainen, R., *see* Farrahi, V., *JBHI Jan. 2020 27-38*
Kramer, J., Boone, L., Clifford, T., Bruce, J., and Matta, J., Analysis of Medical Data Using Community Detection on Inferred Networks; *JBHI Nov. 2020 3136-3143*
Kretowska, M., Oblique Survival Trees in Discrete Event Time Analysis; *JBHI Jan. 2020 247-258*
Krishnan, S., *see* Gurve, D., *JBHI March 2020 669-680*
Kruger, U., *see* Guo, H., *JBHI Feb. 2020 457-464*
Kudenchuk, P.J., *see* Coult, J., *JBHI March 2020 768-774*
Kuderle, A., *see* Ullrich, M., *JBHI July 2020 1869-1878*
Kukuk, M., *see* Spicher, N., *JBHI Aug. 2020 2216-2229*
Kumar, A., *see* Mahmoud, S.S., *JBHI Nov. 2020 3191-3202*
Kumar R, D., *see* Acharya, S., *JBHI June 2020 1717-1726*
Kumar R, D., *see* Acharya, S., *JBHI Sept. 2020 2726*
Kumara, S., *see* Liu, N., *JBHI Jan. 2020 57-68*
Kurc, T., *see* Panayides, A.S., *JBHI July 2020 1837-1857*
Kurillo, G., *see* Matthew, R.P., *JBHI Nov. 2020 3285-3294*
Kuruvilla-Dugdale, M., *see* Zhao, Y., *JBHI Oct. 2020 2942-2949*
Kushner-Lenhoff, S., *see* Sarabi, M.S., *JBHI Dec. 2020 3466-3479*
Kusulla, S., *see* Meinich-Bache, O., *JBHI Nov. 2020 3258-3267*
Kutlu, Y., *see* Altan, G., *JBHI May 2020 1344-1350*
Kuzdeuov, A., Baimukashev, D., Karabay, A., Ibragimov, B., Mirzakhmetov, A., Nurpeiissov, M., Lewis, M., and Atakan Varol, H., A Network-Based Stochastic Epidemic Simulator: Controlling COVID-19 With Region-Specific Policies; *JBHI Oct. 2020 2743-2754*
Kwok, H., *see* Coult, J., *JBHI March 2020 768-774*
Kwon, H.B., *see* Choi, S.H., *JBHI Dec. 2020 3606-3615*
Kyritsis, K., *see* Papadopoulos, A., *JBHI Sept. 2020 2559-2569*

L

Ladd, S.L., *see* Gurel, N.Z., *JBHI July 2020 1917-1925*
Lai, D., Bu, Y., Su, Y., Zhang, X., and Ma, C., Non-Standardized Patch-Based ECG Lead Together With Deep Learning Based Algorithm for Automatic Screening of Atrial Fibrillation; *JBHI June 2020 1569-1578*
Lai, H., Saavedra-Pena, G., Sodini, C.G., Sze, V., and Heldt, T., Measuring Saccade Latency Using Smartphone Cameras; *JBHI March 2020 885-897*
Laine, A.F., *see* Yang, J., *JBHI April 2020 1180-1187*
Lalande, A., *see* Hussain, R., *JBHI July 2020 2093-2106*
Laleg-Kirati, T., *see* Chahid, A., *JBHI Oct. 2020 2814-2824*
Lamarsalle, L., *see* De Oliveira, H., *JBHI Nov. 2020 3076-3084*
Lan, L., *see* Li, Y., *JBHI Oct. 2020 2787-2797*
Lane, A.N., *see* Zhang, Y., *JBHI May 2020 1528-1536*
Lapointe, P., *see* Chapron, K., *JBHI Aug. 2020 2368-2377*
Laszka, A., *see* Whaiduzzaman, M., *JBHI Dec. 2020 3564-3575*
Lau, T., *see* Zhao, S., *JBHI May 2020 1394-1404*
Lee, J., Oh, K., Kim, B., and Yoo, S.K., Synthesis of Electrocardiogram V-Lead Signals From Limb-Lead Measurement Using R-Peak Aligned Generative Adversarial Network; *JBHI May 2020 1265-1275*
Lee, K., Joint Audio-Ultrasound Food Recognition for Noisy Environments; *JBHI May 2020 1477-1489*
Lee, M., *see* Jalali, A., *JBHI Feb. 2020 407-413*
Lee, M.H., *see* Choi, S.H., *JBHI Dec. 2020 3606-3615*
Lee, S., *see* Van Steenkiste, T., *JBHI Sept. 2020 2589-2598*
Lee, Y.J., *see* Choi, S.H., *JBHI Dec. 2020 3606-3615*
Lee, Y.R., *see* Wu, D., *JBHI Dec. 2020 3529-3538*
Lei, B., *see* Dong, J., *JBHI April 2020 931-942*
Lei, H., *see* Ranchal, R., *JBHI Nov. 2020 3182-3188*
Leino, A., *see* Korkalainen, H., *JBHI July 2020 2073-2081*
Leng, T., *see* Ma, X., *JBHI Dec. 2020 3443-3455*
Leonhardt, S., *see* Lueken, M., *JBHI July 2020 1879-1886*
Leonhardt, S., *see* Hoog Antink, C., *JBHI Aug. 2020 2230-2237*
Leppanen, T., *see* Korkalainen, H., *JBHI July 2020 2073-2081*
Leri, D., *see* Baldassano, S.N., *JBHI Aug. 2020 2389-2397*
Lewis, M., *see* Kuzdeuov, A., *JBHI Oct. 2020 2743-2754*
Lewis, S.J.G., *see* Hu, K., *JBHI April 2020 1215-1225*
Leyva-Vallina, M., *see* Martinez, E.T., *JBHI March 2020 866-877*
Li, A., *see* Zhang, Y., *JBHI Jan. 2020 171-179*
Li, B., *see* Hu, X., *JBHI Sept. 2020 2599-2608*
Li, C., Dong, D., Li, L., Gong, W., Li, X., Bai, Y., Wang, M., Hu, Z., Zha, Y., and Tian, J., Classification of Severe and Critical Covid-19 Using Deep Learning and Radiomics; *JBHI Dec. 2020 3585-3594*
Li, D., *see* Zhang, S., *JBHI April 2020 965-973*

Li, F., *see* Zhang, H., *JBHI Dec. 2020 3408-3420*
Li, F., *see* Clemente, J., *JBHI Feb. 2020 524-532*
Li, G., *see* Cai, S., *JBHI Sept. 2020 2630-2638*
Li, G., *see* Zhang, Y., *JBHI Sept. 2020 2621-2629*
Li, G., *see* Hu, D., *JBHI Jan. 2020 214-225*
Li, H., Fang, J., Liu, S., Liang, X., Yang, X., Mai, Z., Van, M.T., Wang, T., Chen, Z., and Ni, D., CR-Unet: A Composite Network for Ovary and Follicle Segmentation in Ultrasound Images; *JBHI April 2020 974-983*
Li, H., *see* Hu, X., *JBHI Sept. 2020 2599-2608*
Li, H., *see* Peng, L., *JBHI Aug. 2020 2327-2336*
Li, H., *see* Ren, J., *JBHI Dec. 2020 3551-3563*
Li, J., *see* Yao, J., *JBHI June 2020 1550-1556*
Li, J., Pu, Y., Tang, J., Zou, Q., and Guo, F., DeepAVP: A Dual-Channel Deep Neural Network for Identifying Variable-Length Antiviral Peptides; *JBHI Oct. 2020 3012-3019*
Li, J., *see* Chen, B., *JBHI July 2020 2016-2027*
Li, J., *see* Chen, B., *JBHI Aug. 2020 2292-2302*
Li, J., *see* Xue, X., *JBHI Feb. 2020 377-386*
Li, J., *see* Xu, X., *JBHI Feb. 2020 556-567*
Li, K., Liu, C., Zhu, T., Herrero, P., and Georgiou, P., GluNet: A Deep Learning Framework for Accurate Glucose Forecasting; *JBHI Feb. 2020 414-423*
Li, K., Daniels, J., Liu, C., Herrero, P., and Georgiou, P., Convolutional Recurrent Neural Networks for Glucose Prediction; *JBHI Feb. 2020 603-613*
Li, L., *see* Fan, M., *JBHI June 2020 1632-1642*
Li, L., *see* Li, C., *JBHI Dec. 2020 3585-3594*
Li, L., *see* Meng, L., *JBHI Dec. 2020 3576-3584*
Li, M., *see* Lu, C., *JBHI Aug. 2020 2420-2429*
Li, M., *see* Jiang, H., *JBHI Dec. 2020 3630-3641*
Li, Q., *see* Ying, J., *JBHI June 2020 1805-1813*
Li, Q., *see* Huang, Q., *JBHI Jan. 2020 160-170*
Li, Q., *see* Zhang, M., *JBHI Nov. 2020 3095-3102*
Li, Q., *see* Wu, D., *JBHI Dec. 2020 3529-3538*
Li, S., *see* Dong, J., *JBHI April 2020 931-942*
Li, S., *see* Zhao, R., *JBHI April 2020 1104-1113*
Li, S., *see* Zhang, R., *JBHI Oct. 2020 2902-2911*
Li, S., *see* Zhou, Z., *JBHI Jan. 2020 194-204*
Li, S., *see* Lin, L., *JBHI Nov. 2020 3248-3257*
Li, W., Zhang, L., Qiao, L., and Shen, D., Toward a Better Estimation of Functional Brain Network for Mild Cognitive Impairment Identification: A Transfer Learning View; *JBHI April 2020 1160-1168*
Li, W., *see* Du, J., *JBHI April 2020 1169-1179*
Li, W., *see* Xu, Q., *JBHI Sept. 2020 2481-2489*
Li, W., *see* Huang, Q., *JBHI Oct. 2020 2860-2869*
Li, W., *see* Huang, Q., *JBHI Jan. 2020 160-170*
Li, W., *see* Sun, C., *JBHI May 2020 1351-1366*
Li, X., *see* Dong, F., *JBHI July 2020 2082-2092*
Li, X., *see* Yang, X., *JBHI March 2020 855-865*
Li, X., *see* Zhang, M., *JBHI Nov. 2020 3095-3102*
Li, X., *see* Li, C., *JBHI Dec. 2020 3585-3594*
Li, Y., *see* Wang, R., *JBHI Sept. 2020 2461-2472*
Li, Y., *see* Zhang, X., *JBHI Oct. 2020 2852-2859*
Li, Y., *see* Amini, A., *JBHI Oct. 2020 2731-2732*
Li, Y., *see* Zhang, R., *JBHI Oct. 2020 2902-2911*
Li, Y., Wei, D., Chen, J., Cao, S., Zhou, H., Zhu, Y., Wu, J., Lan, L., Sun, W., Qian, T., Ma, K., Xu, H., and Zheng, Y., Efficient and Effective Training of COVID-19 Classification Networks With Self-Supervised Dual-Track Learning to Rank; *JBHI Oct. 2020 2787-2797*
Li, Y., *see* Miao, F., *JBHI Jan. 2020 79-91*
Li, Y., *see* Lu, C., *JBHI Aug. 2020 2420-2429*
Li, Y., *see* He, W., *JBHI March 2020 636-648*
Li, Y., *see* Mahmoud, S.S., *JBHI Nov. 2020 3191-3202*
Li, Y., *see* Jiang, H., *JBHI Dec. 2020 3630-3641*
Li, Z., *see* Xu, Q., *JBHI Sept. 2020 2481-2489*
Li, Z., *see* He, J., *JBHI Sept. 2020 2473-2480*
Lian, J., *see* He, Y., *JBHI Feb. 2020 493-502*
Liang, Q., *see* Tang, P., *JBHI Oct. 2020 2870-2882*
Liang, X., *see* Li, H., *JBHI April 2020 974-983*
Liao, H., *see* Ahmed, M.R., *JBHI Nov. 2020 3044-3054*
Liao, H., *see* Chen, F., *JBHI Dec. 2020 3616-3629*
Liao, W., He, P., Hao, J., Wang, X., Yang, R., An, D., and Cui, L., Automatic Identification of Breast Ultrasound Image Based on Supervised Block-Based Region Segmentation Algorithm and Features Combination Migration Deep Learning Model; *JBHI April 2020 984-993*
Liao, W., Zou, B., Zhao, R., Chen, Y., He, Z., and Zhou, M., Clinical Interpretable Deep Learning Model for Glaucoma Diagnosis; *JBHI May 2020 1405-1412*
Liao, Y., *see* Dong, J., *JBHI April 2020 931-942*
Liatsis, P., *see* Rodrigues, E.O., *JBHI Dec. 2020 3507-3519*
Lin, B., Chen, J., Tu, Y., Shih, Y., Lin, Y., Chi, W., and Wu, Y., Using Deep Learning in Ultrasound Imaging of Bicipital Peritendinous Effusion to Grade Inflammation Severity; *JBHI April 2020 1037-1045*
Lin, C., *see* Sung, S., *JBHI Oct. 2020 2922-2931*
Lin, C., *see* Lin, G., *JBHI July 2020 1907-1916*
Lin, G., Nagamine, M., Yang, S., Tai, Y., Lin, C., and Sato, H., Machine Learning Based Suicide Ideation Prediction for Military Personnel; *JBHI July 2020 1907-1916*
Lin, J., *see* Song, L., *JBHI Oct. 2020 2912-2921*
Lin, J., *see* Shang, C., *JBHI Jan. 2020 131-143*
Lin, L., *see* Zhong, L., *JBHI April 2020 1114-1124*
Lin, L., *see* Peng, L., *JBHI Aug. 2020 2327-2336*
Lin, L., Tao, X., Pang, S., Su, Z., Lu, H., Li, S., Feng, Q., and Chen, B., Multiple Axial Spine Indices Estimation via Dense Enhancing Network With Cross-Space Distance-Preserving Regularization; *JBHI Nov. 2020 3248-3257*
Lin, S., *see* Huang, J., *JBHI Jan. 2020 292-299*
Lin, T., *see* Tsai, K., *JBHI Nov. 2020 3203-3214*
Lin, W., *see* Hu, D., *JBHI Jan. 2020 214-225*
Lin, Y., *see* Lin, B., *JBHI April 2020 1037-1045*
Lin, Y., *see* Yang, X., *JBHI March 2020 855-865*
Lin, Y., Constructing a Personalized Cross-Day EEG-Based Emotion-Classification Model Using Transfer Learning; *JBHI May 2020 1255-1264*
Lina, J., *see* Matar, G., *JBHI Jan. 2020 101-110*
Lipping, T., *see* Zabihi, M., *JBHI Feb. 2020 543-555*
List, J., *see* Martindale, C.F., *JBHI May 2020 1490-1499*
Litchfield, I., *see* de Figueiredo, R.P., *JBHI Sept. 2020 2718-2725*
Litt, B., *see* Baldassano, S.N., *JBHI Aug. 2020 2389-2397*
Liu, A., *see* Qiao, R., *JBHI Aug. 2020 2157-2168*
Liu, A., *see* Lu, Y., *JBHI May 2020 1367-1378*
Liu, C., *see* Li, K., *JBHI Feb. 2020 414-423*
Liu, C., *see* Li, K., *JBHI Feb. 2020 603-613*
Liu, D., *see* Sun, C., *JBHI June 2020 1643-1651*
Liu, D., Baskett, W., Beversdorf, D., and Shyu, C., Exploratory Data Mining for Subgroup Cohort Discoveries and Prioritization; *JBHI May 2020 1456-1468*
Liu, G., *see* Zhang, T., *JBHI July 2020 1940-1951*
Liu, H., *see* Wu, Q., *JBHI June 2020 1772-1779*
Liu, H., *see* Cao, H., *JBHI July 2020 2006-2015*
Liu, J., *see* Wu, M., *JBHI June 2020 1823-1834*
Liu, J., *see* Jiao, C., *JBHI Oct. 2020 3002-3011*
Liu, J., *see* Miao, F., *JBHI Jan. 2020 79-91*
Liu, J., Ji, J., Jia, X., and Zhang, A., Learning Brain Effective Connectivity Network Structure Using Ant Colony Optimization Combining With Voxel Activation Information; *JBHI July 2020 2028-2040*
Liu, J., *see* Cui, Z., *JBHI May 2020 1519-1527*
Liu, J., *see* Zhang, Y., *JBHI May 2020 1528-1536*
Liu, J., Han, Y., Liu, T., Aguilera, N., and Tam, J., Spatially Aware Dense-LinkNet Based Regression Improves Fluorescent Cell Detection in Adaptive Optics Ophthalmic Images; *JBHI Dec. 2020 3520-3528*
Liu, J., *see* Zhang, H., *JBHI Dec. 2020 3408-3420*
Liu, J., *see* Luo, Y., *JBHI Dec. 2020 3374-3383*
Liu, J., *see* Chen, F., *JBHI Dec. 2020 3616-3629*
Liu, J., Sodini, C.G., Ou, Y., Yan, B., Zhang, Y., and Zhao, N., Feasibility of Fingertip Oscillometric Blood Pressure Measurement: Model-Based Analysis and Experimental Validation; *JBHI Feb. 2020 533-542*
Liu, L., *see* He, T., *JBHI June 2020 1762-1771*

Liu, L., Xu, J., Huan, Y., Zou, Z., Yeh, S., and Zheng, L., A Smart Dental Health-IoT Platform Based on Intelligent Hardware, Deep Learning, and Mobile Terminal; *JBHI March 2020 898-906*
Liu, L., Wu, F., Wang, Y., and Wang, J., Multi-Receptive-Field CNN for Semantic Segmentation of Medical Images; *JBHI Nov. 2020 3215-3225*
Liu, L., *see* Luo, Y., *JBHI Dec. 2020 3374-3383*
Liu, M., *see* Qiu, H., *JBHI Sept. 2020 2499-2505*
Liu, N., Chen, C., and Kumara, S., Semi-Supervised Learning Algorithm for Identifying High-Priority Drug–Drug Interactions Through Adverse Event Reports; *JBHI Jan. 2020 57-68*
Liu, Q., *see* Wang, Z., *JBHI Oct. 2020 2806-2813*
Liu, S., *see* Li, H., *JBHI April 2020 974-983*
Liu, S., *see* Zhong, L., *JBHI April 2020 1114-1124*
Liu, S., *see* Dong, J., *JBHI April 2020 931-942*
Liu, T., *see* Zhu, H., *JBHI June 2020 1652-1663*
Liu, T., Truong, N.D., Nikpour, A., Zhou, L., and Kavehei, O., Epileptic Seizure Classification With Symmetric and Hybrid Bilinear Models; *JBHI Oct. 2020 2844-2851*
Liu, T., *see* Cao, H., *JBHI July 2020 2006-2015*
Liu, T., *see* Liu, J., *JBHI Dec. 2020 3520-3528*
Liu, W., *see* Chang, L., *JBHI Nov. 2020 3111-3123*
Liu, W., Wang, F., Huang, Q., Chang, S., Wang, H., and He, J., MFB-CBRNN: A Hybrid Network for MI Detection Using 12-Lead ECGs; *JBHI Feb. 2020 503-514*
Liu, X., *see* Zhao, R., *JBHI April 2020 1104-1113*
Liu, X., Zhou, P., Qiu, T., and Wu, D.O., Blockchain-Enabled Contextual Online Learning Under Local Differential Privacy for Coronary Heart Disease Diagnosis in Mobile Edge Computing; *JBHI Aug. 2020 2177-2188*
Liu, X., *see* Pereira, T., *JBHI March 2020 649-657*
Liu, X., Chen, C., Karvela, M., and Toumazou, C., A DNA-Based Intelligent Expert System for Personalised Skin-Health Recommendations; *JBHI Nov. 2020 3276-3284*
Liu, Y., *see* Zhong, L., *JBHI April 2020 1114-1124*
Liu, Y., *see* He, J., *JBHI Sept. 2020 2473-2480*
Liu, Y., *see* Ahmed, M.R., *JBHI Nov. 2020 3044-3054*
Liu, Z., *see* Zhang, X., *JBHI Oct. 2020 2852-2859*
Liu, Z., *see* Zhang, R., *JBHI Oct. 2020 2902-2911*
Liu, Z., *see* Miao, F., *JBHI Jan. 2020 79-91*
Liu, Z., *see* Wu, D., *JBHI Dec. 2020 3529-3538*
Lo, B., *see* Lo, F.P.W., *JBHI July 2020 1926-1939*
Lo, B., *see* Di Camillo, B., *JBHI Nov. 2020 3041-3043*
Lo, B., *see* Zhang, Y., *JBHI Feb. 2020 465-474*
Lo, B.P.L., *see* Chen, C., *JBHI Aug. 2020 2208-2215*
Lo, F.P.W., Sun, Y., Qiu, J., and Lo, B., Image-Based Food Classification and Volume Estimation for Dietary Assessment: A Review; *JBHI July 2020 1926-1939*
Lohmann, C.P., *see* Sarhan, M.H., *JBHI Dec. 2020 3338-3350*
Lohmueller, L., *see* Movahedi, F., *JBHI Aug. 2020 2347-2358*
Loi, D., *see* Macis, S., *JBHI Jan. 2020 268-279*
Loparo, K., *see* Ye, Y., *JBHI Oct. 2020 2755-2764*
Lopes, R., *see* Vundavilli, H., *JBHI Aug. 2020 2430-2438*
Lopez, M., *see* Meng, Y., *JBHI March 2020 878-884*
Lopour, B.A., *see* Smith, R.J., *JBHI April 2020 1070-1079*
Loram, I., Siddique, A., Sanchez, M.B., Harding, P., Silverdale, M., Kobylecki, C., and Cunningham, R., Objective Analysis of Neck Muscle Boundaries for Cervical Dystonia Using Ultrasound Imaging and Deep Learning; *JBHI April 2020 1016-1027*
Lotz, J., *see* Matthew, R.P., *JBHI Nov. 2020 3285-3294*
Loveday, W., *see* Hu, X., *JBHI May 2020 1447-1455*
Lovell, N., *see* Yang, G., *JBHI Sept. 2020 2535-2549*
Lovell, N., *see* Yang, G., *JBHI Sept. 2020 2442-2443*
Lovell, N.H., *see* Huang, Q., *JBHI Jan. 2020 160-170*
Lu, C., Yang, M., Li, M., Li, Y., Wu, F., and Wang, J., Predicting Human lncRNA-Disease Associations Based on Geometric Matrix Completion; *JBHI Aug. 2020 2420-2429*
Lu, G., *see* Chen, B., *JBHI July 2020 2016-2027*
Lu, G., *see* Chen, B., *JBHI Aug. 2020 2292-2302*
Lu, H., *see* Lin, L., *JBHI Nov. 2020 3248-3257*
Lu, K., *see* Mengoudi, K., *JBHI Nov. 2020 3066-3075*
Lu, L., *see* Lv, W., *JBHI Aug. 2020 2268-2277*
Lu, L., *see* He, W., *JBHI March 2020 636-648*
Lu, L., *see* Wang, H., *JBHI Feb. 2020 475-485*
Lu, M., *see* Xu, B., *JBHI June 2020 1703-1716*
Lu, M., *see* Wu, H., *JBHI March 2020 804-814*
Lu, Q., *see* Zhang, X., *JBHI Sept. 2020 2663-2670*
Lu, X., *see* Guo, X., *JBHI Aug. 2020 2315-2326*
Lu, Y., Hahn, J.K., and Zhang, X., 3D Shape-Based Body Composition Inference Model Using a Bayesian Network; *JBHI Jan. 2020 205-213*
Lu, Y., *see* Guo, X., *JBHI Aug. 2020 2315-2326*
Lu, Y., Liu, A., Chen, M., Nie, W., and Su, Y., Sequential Saliency Guided Deep Neural Network for Joint Mitosis Identification and Localization in Time-Lapse Phase Contrast Microscopy Images; *JBHI May 2020 1367-1378*
Lueken, M., Kate, W.t., Valenti, G., Batista, J.P., Bollheimer, C., Leonhardt, S., and Ngo, C., Estimation of Stride Time Variability in Unobtrusive Long-Term Monitoring Using Inertial Measurement Sensors; *JBHI July 2020 1879-1886*
Luengo, J., *see* Tabik, S., *JBHI Dec. 2020 3595-3605*
Lugade, V., *see* Silsupadol, P., *JBHI April 2020 1188-1195*
Luo, J., *see* Zhao, S., *JBHI May 2020 1394-1404*
Luo, J., *see* Pan, C., *JBHI Feb. 2020 626-633*
Luo, L., *see* Wang, X., *JBHI Dec. 2020 3431-3442*
Luo, S., *see* Ren, J., *JBHI Dec. 2020 3551-3563*
Luo, X., *see* Qiao, R., *JBHI Aug. 2020 2157-2168*
Luo, Y., Chen, K., Liu, L., Liu, J., Mao, J., Ke, G., and Sun, M., Dehaze of Cataractous Retinal Images Using an Unpaired Generative Adversarial Network; *JBHI Dec. 2020 3374-3383*
Luque, E., *see* Shojaei, E., *JBHI Sept. 2020 2490-2498*
Lv, H., *see* Zhou, H., *JBHI June 2020 1541-1549*
Lv, W., Ashrafinia, S., Ma, J., Lu, L., and Rahmim, A., Multi-Level Multi-Modality Fusion Radiomics: Application to PET and CT Imaging for Prognostication of Head and Neck Cancer; *JBHI Aug. 2020 2268-2277*
Lv, Z., *see* Wu, X., *JBHI March 2020 775-787*

M

Ma, B., *see* Teng, J., *JBHI Feb. 2020 354-364*
Ma, C., *see* Lai, D., *JBHI June 2020 1569-1578*
Ma, F., Yu, L., Ye, L., Yao, D.D., and Zhuang, W., Length-of-Stay Prediction for Pediatric Patients With Respiratory Diseases Using Decision Tree Methods; *JBHI Sept. 2020 2651-2662*
Ma, G., *see* Cao, H., *JBHI July 2020 2006-2015*
Ma, J., *see* Lv, W., *JBHI Aug. 2020 2268-2277*
Ma, J., *see* Yue, Z., *JBHI March 2020 844-854*
Ma, K., *see* Cai, S., *JBHI Sept. 2020 2630-2638*
Ma, K., *see* Li, Y., *JBHI Oct. 2020 2787-2797*
Ma, M., *see* Pereira, T., *JBHI March 2020 649-657*
Ma, P., *see* Ren, J., *JBHI Dec. 2020 3551-3563*
Ma, X., Ji, Z., Niu, S., Leng, T., Rubin, D.L., and Chen, Q., MS-CAM: Multi-Scale Class Activation Maps for Weakly-Supervised Segmentation of Geographic Atrophy Lesions in SD-OCT Images; *JBHI Dec. 2020 3443-3455*
Ma, Y., *see* Sun, H., *JBHI June 2020 1664-1676*
Ma, Z., *see* Teng, F., *JBHI Sept. 2020 2506-2515*
Macis, S., Loi, D., Ulgheri, A., Pani, D., Solinas, G., Manna, S.L., Cestone, V., Guerri, D., and Raffo, L., Design and Usability Assessment of a Multi-Device SOA-Based Telecare Framework for the Elderly; *JBHI Jan. 2020 268-279*
Madan, H., Berlot, R., Ray, N.J., Pernus, F., and Spiclin, Z., Practical Priors for Bayesian Inference of Latent Biomarkers; *JBHI Feb. 2020 396-406*
Madhusudhan, S., *see* Wu, X., *JBHI Dec. 2020 3480-3490*
Maharatna, K., *see* Chen, H., *JBHI Oct. 2020 2825-2832*
Mahmoud, S.S., Kumar, A., Tang, Y., Li, Y., Gu, X., Fu, J., and Fang, Q., An Efficient Deep Learning Based Method for Speech Assessment of Mandarin-Speaking Aphasic Patients; *JBHI Nov. 2020 3191-3202*
Mai, Y., *see* Hoog Antink, C., *JBHI Aug. 2020 2230-2237*

Mai, Z., *see* Li, H., *JBHI April 2020 974-983*
Maier, M., *see* Sarhan, M.H., *JBHI Dec. 2020 3338-3350*
Mak, M., *see* Xu, S.S., *JBHI March 2020 717-727*
Malik, A., *see* Ai, W., *JBHI June 2020 1579-1588*
Manna, S.L., *see* Macis, S., *JBHI Jan. 2020 268-279*
Mao, J., *see* Luo, Y., *JBHI Dec. 2020 3374-3383*
Marchetto, G., *see* Sacco, A., *JBHI Sept. 2020 2523-2534*
Martin-Rodriguez, J.L., *see* Tabik, S., *JBHI Dec. 2020 3595-3605*
Martina, S., Ventura, L., and Frasconi, P., Classification of Cancer Pathology Reports: A Large-Scale Comparative Study; *JBHI Nov. 2020 3085-3094*
Martindale, C.F., Roth, N., Gassner, H., List, J., Regensburger, M., Eskofier, B.M., and Kohl, Z., Technical Validation of an Automated Mobile Gait Analysis System for Hereditary Spastic Paraplegia Patients; *JBHI May 2020 1490-1499*
Martinez, E.T., Leyva-Vallina, M., Sarker, M.M.K., Puig, D., Petkov, N., and Radeva, P., Hierarchical Approach to Classify Food Scenes in Egocentric Photo-Streams; *JBHI March 2020 866-877*
Martinez, M., and De Leon, P.L., Falls Risk Classification of Older Adults Using Deep Neural Networks and Transfer Learning; *JBHI Jan. 2020 144-150*
Martinez-Murcia, F.J., Ortiz, A., Gorriz, J., Ramirez, J., and Castillo-Barnes, D., Studying the Manifold Structure of Alzheimer's Disease: A Deep Learning Approach Using Convolutional Autoencoders; *JBHI Jan. 2020 17-26*
Marxreiter, F., *see* Ullrich, M., *JBHI July 2020 1869-1878*
Masjedi, M., *see* Wu, D., *JBHI Dec. 2020 3529-3538*
Masseroli, M., *see* Ceddia, G., *JBHI Nov. 2020 3162-3172*
Matar, G., Lina, J., and Kaddoum, G., Artificial Neural Network for in-Bed Posture Classification Using Bed-Sheet Pressure Sensors; *JBHI Jan. 2020 101-110*
Mathew, M.J., *see* Temel, D., *JBHI March 2020 788-795*
Matta, J., *see* Kramer, J., *JBHI Nov. 2020 3136-3143*
Matthew, R.P., Seko, S., Kurillo, G., Bajcsy, R., Cheng, L., Han, J.J., and Lotz, J., Reachable Workspace and Proximal Function Measures for Quantifying Upper Limb Motion; *JBHI Nov. 2020 3285-3294*
Maude, R.J., *see* Yang, F., *JBHI May 2020 1427-1438*
Mauri, G., *see* Nobile, M.S., *JBHI Nov. 2020 3173-3181*
Mayberg, H., *see* Harati, S., *JBHI March 2020 815-824*
McDermott, B., O'Halloran, M., Avery, J., and Porter, E., Bi-Frequency Symmetry Difference EIT—Feasibility and Limitations of Application to Stroke Diagnosis; *JBHI Aug. 2020 2407-2419*
McDonald, M., *see* Zhuang, Y., *JBHI Aug. 2020 2260-2267*
McManus, D.D., *see* Bashar, S.K., *JBHI Nov. 2020 3124-3135*
Mdhaffar, A., *see* Daoud, S., *JBHI Nov. 2020 3154-3161*
Megalooikonomou, V., *see* Zacharaki, E.I., *JBHI June 2020 1557-1568*
Mehra, M., *see* Ranchal, R., *JBHI Nov. 2020 3182-3188*
Mei, J., *see* Zhang, X., *JBHI Sept. 2020 2663-2670*
Mei, S., *see* Hu, K., *JBHI April 2020 1215-1225*
Meinich-Bache, O., Engan, K., Austvoll, I., Eftestol, T., Myklebust, H., Yarrot, L.B., Kidanto, H., and Ersdal, H., Object Detection During Newborn Resuscitation Activities; *JBHI March 2020 796-803*
Meinich-Bache, O., Austnes, S.L., Engan, K., Austvoll, I., Eftestol, T., Myklebust, H., Kusulla, S., Kidanto, H., and Ersdal, H., Activity Recognition From Newborn Resuscitation Videos; *JBHI Nov. 2020 3258-3267*
Meisel, K., *see* Pereira, T., *JBHI March 2020 649-657*
Memedi, M., *see* Aghanavesi, S., *JBHI Jan. 2020 111-119*
Memmi, G., *see* Qiu, H., *JBHI Sept. 2020 2499-2505*
Meng, L., Dong, D., Li, L., Niu, M., Bai, Y., Wang, M., Qiu, X., Zha, Y., and Tian, J., A Deep Learning Prognosis Model Help Alert for COVID-19 Patients at High-Risk of Death: A Multi-Center Study; *JBHI Dec. 2020 3576-3584*
Meng, Q., Hashimoto, Y., and Satoh, S., How to Extract More Information With Less Burden: Fundus Image Classification and Retinal Disease Localization With Ophthalmologist Intervention; *JBHI Dec. 2020 3351-3361*
Meng, Y., *see* Bridge, J., *JBHI Oct. 2020 2776-2786*
Meng, Y., Speier, W., Shufelt, C., Joung, S., E Van Eyk, J., Bairey Merz, C.N., Lopez, M., Spiegel, B., and Arnold, C.W., A Machine Learning Approach to Classifying Self-Reported Health Status in a Cohort of Patients With Heart Disease Using Activity Tracker Data; *JBHI March 2020 878-884*
Mengoudi, K., Ravi, D., Yong, K.X.X., Primativo, S., Pavisic, I.M., Brotherhood, E., Lu, K., Schott, J.M., Crutch, S.J., and Alexander, D.C., Augmenting Dementia Cognitive Assessment With Instruction-Less Eye-Tracking Tests; *JBHI Nov. 2020 3066-3075*
Menze, B., *see* Hu, X., *JBHI Sept. 2020 2599-2608*
Mercuri, N.B., *see* Ricci, M., *JBHI Jan. 2020 120-130*
Mertes, G., Ding, L., Chen, W., Hallez, H., Jia, J., and Vanrumste, B., Measuring and Localizing Individual Bites Using a Sensor Augmented Plate During Unrestricted Eating for the Aging Population; *JBHI May 2020 1509-1518*
Mesin, L., Mokabberi, F., and Carlino, C.F., Automated Morphological Measurements of Brain Structures and Identification of Optimal Surgical Intervention for Chiari I Malformation; *JBHI Nov. 2020 3144-3153*
Metwally, A.A., *see* Reiman, D., *JBHI Oct. 2020 2993-3001*
Metze, F., *see* Dong, F., *JBHI July 2020 2082-2092*
Miao, F., Liu, Z., Liu, J., Wen, B., He, Q., and Li, Y., Multi-Sensor Fusion Approach for Cuff-Less Blood Pressure Measurement; *JBHI Jan. 2020 79-91*
Mihajlovic, V., *see* Witteveen, J., *JBHI March 2020 735-746*
Milic, V., *see* Vukicevic, A.M., *JBHI March 2020 835-843*
Mirzakhmetov, A., *see* Kuzdeuov, A., *JBHI Oct. 2020 2743-2754*
Misericordia, P., *see* Bernardini, M., *JBHI Jan. 2020 235-246*
Mishra, A., *see* Hoogi, A., *JBHI Sept. 2020 2711-2717*
Mitra, S., Saha, S., and Hasanuzzaman, M., A Multi-View Deep Neural Network Model for Chemical-Disease Relation Extraction From Imbalanced Datasets; *JBHI Nov. 2020 3315-3325*
Mo, Z., *see* Sun, L., *JBHI Oct. 2020 2798-2805*
Mobin, H.K., *see* Wu, D., *JBHI Dec. 2020 3529-3538*
Mohamed, A., *see* Hao, D., *JBHI Sept. 2020 2701-2710*
Mohindra, A., *see* Ranchal, R., *JBHI Nov. 2020 3182-3188*
Mokabberi, F., *see* Mesin, L., *JBHI Nov. 2020 3144-3153*
Molinuevo, J.L., *see* Casamitjana, A., *JBHI Feb. 2020 365-376*
Montaser, E., Diez, J., Rossetti, P., Rashid, M., Cinar, A., and Bondia, J., Seasonal Local Models for Glucose Prediction in Type 1 Diabetes; *JBHI July 2020 2064-2072*
Monteiro-Guerra, F., Rivera-Romero, O., Fernandez-Luque, L., and Caulfield, B., Personalization in Real-Time Physical Activity Coaching Using Mobile Applications: A Scoping Review; *JBHI June 2020 1738-1751*
Montesa, J., *see* Zacharaki, E.I., *JBHI June 2020 1557-1568*
Moraes, R., *see* Speranza, C.G., *JBHI June 2020 1796-1804*
Morgado, M., *see* Aresta, G., *JBHI Oct. 2020 2894-2901*
Mortazavi, B.J., *see* Akbari, A., *JBHI Sept. 2020 2639-2650*
Moscoso-Vasquez, M., Colmegna, P., Rosales, N., Garelli, F., and Sanchez-Pena, R., Control-Oriented Model With Intra-Patient Variations for an Artificial Pancreas; *JBHI Sept. 2020 2681-2689*
Moustakas, K., *see* Zacharaki, E.I., *JBHI June 2020 1557-1568*
Movahedi, F., Kormos, R.L., Lohmueller, L., Seese, L., Kanwar, M., Murali, S., Zhang, Y., Padman, R., and Antaki, J.F., Sequential Pattern Mining of Longitudinal Adverse Events After Left Ventricular Assist Device Implant; *JBHI Aug. 2020 2347-2358*
Mukkamala, R., *see* Yao, Y., *JBHI Jan. 2020 69-78*
Muller, H., *see* Domingues, I., *JBHI Jan. 2020 14-16*
Murali, S., *see* Movahedi, F., *JBHI Aug. 2020 2347-2358*
Murat, A., *see* Khaleghi, T., *JBHI July 2020 2107-2118*
Murray, A.D., *see* de Vries, C.F., *JBHI Feb. 2020 586-593*
Myklebust, H., *see* Meinich-Bache, O., *JBHI March 2020 796-803*
Myklebust, H., *see* Meinich-Bache, O., *JBHI Nov. 2020 3258-3267*
Myllymaa, S., *see* Korkalainen, H., *JBHI July 2020 2073-2081*

N

Nagamine, M., *see* Lin, G., *JBHI July 2020 1907-1916*
Nakhaei, A., Sepehri, M.M., Shadpour, P., and Khatibi, T., Studying the Effects of Systemic Inflammatory Markers and Drugs on AVF Longevity through a Novel Clinical Intelligent Framework; *JBHI Nov. 2020 3295-3307*
Namburete, A.I.L., *see* Vaze, S., *JBHI April 2020 1059-1069*

Nanayakkara, P., *see* Paranjape, K., *JBHI July 2020 1860-1863*
Nasseri, M.A., *see* Sarhan, M.H., *JBHI Dec. 2020 3338-3350*
Navab, N., *see* Sarhan, M.H., *JBHI Dec. 2020 3338-3350*
Negrao, E., *see* Aresta, G., *JBHI Oct. 2020 2894-2901*
Nemati, S., *see* Harati, S., *JBHI March 2020 815-824*
Nener, B.D., *see* Xu, B., *JBHI June 2020 1703-1716*
Neumark, N., *see* Wu, D., *JBHI Dec. 2020 3529-3538*
New, A., and Bennett, K.P., A Precision Environment-Wide Association Study of Hypertension via Supervised Cadre Models; *JBHI March 2020 916-925*
Ngo, C., *see* Lueken, M., *JBHI July 2020 1879-1886*
Ngo, C.Q., Chai, R., Nguyen, T.V., Jones, T.W., and Nguyen, H.T., Electroencephalogram Spectral Moments for the Detection of Nocturnal Hypoglycemia; *JBHI May 2020 1237-1245*
Nguyen, H.T., *see* Ngo, C.Q., *JBHI May 2020 1237-1245*
Nguyen, T.V., *see* Ngo, C.Q., *JBHI May 2020 1237-1245*
Nhan, L.N.T., *see* Kiyasseh, D., *JBHI Nov. 2020 3226-3235*
Ni, D., *see* Li, H., *JBHI April 2020 974-983*
Nicosia, G., *see* Di Camillo, B., *JBHI Nov. 2020 3041-3043*
Nie, W., *see* Lu, Y., *JBHI May 2020 1367-1378*
Niemela, M., *see* Farrahi, V., *JBHI Jan. 2020 27-38*
Niessen, W.J., *see* Achterberg, H.C., *JBHI March 2020 825-834*
Nikita, K.S., *see* Panayides, A.S., *JBHI July 2020 1837-1857*
Nikkonen, S., *see* Korkalainen, H., *JBHI July 2020 2073-2081*
Nikpour, A., *see* Liu, T., *JBHI Oct. 2020 2844-2851*
Nir, G., *see* Karimi, D., *JBHI May 2020 1413-1426*
Nisoli, E., *see* Nobile, M.S., *JBHI Nov. 2020 3173-3181*
Niu, G., *see* Zhang, S., *JBHI April 2020 965-973*
Niu, J., Tang, Y., Sun, Z., and Zhang, W., Inter-Patient ECG Classification With Symbolic Representations and Multi-Perspective Convolutional Neural Networks; *JBHI May 2020 1321-1332*
Niu, M., *see* Meng, L., *JBHI Dec. 2020 3576-3584*
Niu, S., *see* Sun, Y., *JBHI Nov. 2020 3236-3247*
Niu, S., *see* Ma, X., *JBHI Dec. 2020 3443-3455*
Nobile, M.S., Nisoli, E., Vlachou, T., Spolaor, S., Cazzaniga, P., Mauri, G., Pelicci, P.G., and Besozzi, D., cuProCell: GPU-Accelerated Analysis of Cell Proliferation With Flow Cytometry Data; *JBHI Nov. 2020 3173-3181*
Noble, J.A., *see* Patra, A., *JBHI April 2020 1046-1058*
Noman, F., Salleh, S., Ting, C., Samdin, S.B., Ombao, H., and Hussain, H., A Markov-Switching Model Approach to Heart Sound Segmentation and Classification; *JBHI March 2020 705-716*
Noman, F., *see* Phang, C., *JBHI May 2020 1333-1343*
Nurpeiissov, M., *see* Kuzdeuov, A., *JBHI Oct. 2020 2743-2754*
Nyholm, D., *see* Aghanavesi, S., *JBHI Jan. 2020 111-119*

O

O'Halloran, M., *see* McDermott, B., *JBHI Aug. 2020 2407-2419*
Oh, K., *see* Lee, J., *JBHI May 2020 1265-1275*
Oksala, N., *see* Hoog Antink, C., *JBHI Aug. 2020 2230-2237*
Okuwobi, I.P., Ji, Z., Fan, W., Yuan, S., Bekalo, L., and Chen, Q., Automated Quantification of Hyperreflective Foci in SD-OCT With Diabetic Retinopathy; *JBHI April 2020 1125-1136*
Oliveira, F.M.G.S., *see* Da Silva, L.S.C.B., *JBHI March 2020 728-734*
Oliver, N., *see* Guemes, A., *JBHI May 2020 1439-1446*
Olmedo-Sanchez, E., *see* Tabik, S., *JBHI Dec. 2020 3595-3605*
Ombao, H., *see* Noman, F., *JBHI March 2020 705-716*
Ombao, H., *see* Phang, C., *JBHI May 2020 1333-1343*
Ombao, H.C., *see* Smith, R.J., *JBHI April 2020 1070-1079*
Oommen, B., *see* Baldassano, S.N., *JBHI Aug. 2020 2389-2397*
Oosterwijk, L., *see* Joshi, R., *JBHI March 2020 681-692*
Orji, R., *see* Jelodar, H., *JBHI Oct. 2020 2733-2742*
Orlandic, L., *see* Hersek, S., *JBHI May 2020 1296-1309*
Orselli, R., *see* Zacharaki, E.I., *JBHI June 2020 1557-1568*
Orting, S.N., Petersen, J., Thomsen, L.H., Wille, M.M.W., and de Bruijne, M., Learning to Quantify Emphysema Extent: What Labels Do We Need?; *JBHI April 2020 1149-1159*
Ortiz, A., *see* Martinez-Murcia, F.J., *JBHI Jan. 2020 17-26*
Ortiz, A., *see* Domingues, I., *JBHI Jan. 2020 14-16*
Ortuno, F.M., *see* Galvez, J.M., *JBHI July 2020 2119-2130*
Ou, Y., *see* Liu, J., *JBHI Feb. 2020 533-542*
Oveisi, M., *see* Saadatnejad, S., *JBHI Feb. 2020 515-523*
Owen, G.I., *see* Fresard, M.E., *JBHI May 2020 1500-1508*
Owens, P.C., *see* Jaureguibeitia, X., *JBHI Sept. 2020 2580-2588*

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P., P.S., *see* S., A.A., *JBHI Jan. 2020 92-100*
P., S., *see* S., A.A., *JBHI Jan. 2020 92-100*
Padman, R., *see* Movahedi, F., *JBHI Aug. 2020 2347-2358*
Pagoulatou, S., *see* Bikia, V., *JBHI July 2020 1968-1981*
Paisley, J., *see* Sun, L., *JBHI Aug. 2020 2303-2314*
Pan, C., Luo, J., and Zhang, J., Computational Identification of RNA-Seq Based miRNA-Mediated Prognostic Modules in Cancer; *JBHI Feb. 2020 626-633*
Pan, F., *see* Huang, Q., *JBHI Oct. 2020 2860-2869*
Pan, Y., *see* Amini, A., *JBHI Oct. 2020 2731-2732*
Panayides, A.S., Amini, A., Filipovic, N.D., Sharma, A., Tsaftaris, S.A., Young, A., Foran, D., Do, N., Golemati, S., Kurc, T., Huang, K., Nikita, K.S., Veasey, B.P., Zervakis, M., Saltz, J.H., and Pattichis, C.S., AI in Medical Imaging Informatics: Current Challenges and Future Directions; *JBHI July 2020 1837-1857*
Pandey, S., *see* Guo, J., *JBHI June 2020 1539-1540*
Pang, H., *see* Wang, H., *JBHI June 2020 1814-1822*
Pang, S., *see* Lin, L., *JBHI Nov. 2020 3248-3257*
Pang, Z., *see* Zhou, H., *JBHI June 2020 1541-1549*
Pang, Z., *see* Yang, G., *JBHI Sept. 2020 2535-2549*
Pang, Z., *see* Yang, G., *JBHI Sept. 2020 2442-2443*
Pang, Z., *see* Zhang, T., *JBHI July 2020 1940-1951*
Pani, D., *see* Macis, S., *JBHI Jan. 2020 268-279*
Papadopoulos, A., Kyritsis, K., Klingelhoefer, L., Bostanjopoulou, S., Chaudhuri, K.R., and Delopoulos, A., Detecting Parkinsonian Tremor From IMU Data Collected in-the-Wild Using Deep Multiple-Instance Learning; *JBHI Sept. 2020 2559-2569*
Papaioannou, T.G., *see* Bikia, V., *JBHI July 2020 1968-1981*
Pappalardo, F., *see* Viceconti, M., *JBHI Jan. 2020 4-13*
Paranjape, K., Schinkel, M., and Nanayakkara, P., Short Keynote Paper: Mainstreaming Personalized Healthcare–Transforming Healthcare Through New Era of Artificial Intelligence; *JBHI July 2020 1860-1863*
Parikh, D., *see* Zhuang, Y., *JBHI Aug. 2020 2260-2267*
Parizi, R.M., *see* Yazdinejad, A., *JBHI Aug. 2020 2146-2156*
Park, J.G., *see* Wu, D., *JBHI Dec. 2020 3529-3538*
Park, K.S., *see* Choi, S.H., *JBHI Dec. 2020 3606-3615*
Park, S.H., *see* Yang, W., *JBHI Aug. 2020 2278-2291*
Park, S.H., *see* Adeli, E., *JBHI Feb. 2020 333-335*
Park, S.Y., *see* Wu, D., *JBHI Dec. 2020 3529-3538*
Partida, C., *see* Semiz, B., *JBHI July 2020 1899-1906*
Pasupathy, K.S., *see* Xian, X., *JBHI Oct. 2020 3029-3037*
Patel, B., *see* Gao, F., *JBHI Jan. 2020 39-49*
Patel, N.D., *see* Ai, W., *JBHI June 2020 1579-1588*
Pathmanathan, J., *see* Baldassano, S.N., *JBHI Aug. 2020 2389-2397*
Patra, A., and Noble, J.A., Hierarchical Class Incremental Learning of Anatomical Structures in Fetal Echocardiography Videos; *JBHI April 2020 1046-1058*
Pattichis, C.S., *see* Panayides, A.S., *JBHI July 2020 1837-1857*
Pavisic, I.M., *see* Mengoudi, K., *JBHI Nov. 2020 3066-3075*
Pedrosa, J., *see* Aresta, G., *JBHI Oct. 2020 2894-2901*
Pelicci, P.G., *see* Nobile, M.S., *JBHI Nov. 2020 3173-3181*
Peng, G., *see* Sun, H., *JBHI June 2020 1664-1676*
Peng, J., and Yuan, Z., Mitochondria Segmentation From EM Images via Hierarchical Structured Contextual Forest; *JBHI Aug. 2020 2251-2259*
Peng, L., Lin, L., Hu, H., Zhang, Y., Li, H., Iwamoto, Y., Han, X., and Chen, Y., Semi-Supervised Learning for Semantic Segmentation of Emphysema With Partial Annotations; *JBHI Aug. 2020 2327-2336*
Peng, P., *see* Zhang, Y., *JBHI Sept. 2020 2621-2629*
Peng, Q., *see* Ye, Y., *JBHI Oct. 2020 2755-2764*

Peng, W., *see* Xu, Q., *JBHI Sept. 2020 2481-2489*
Pennisi, M., *see* Viceconti, M., *JBHI Jan. 2020 4-13*
Pereira, T., Gadhoumi, K., Ma, M., Liu, X., Xiao, R., Colorado, R.A., Keenan, K.J., Meisel, K., and Hu, X., A Supervised Approach to Robust Photoplethysmography Quality Assessment; *JBHI March 2020 649-657*
Pernus, F., *see* Madan, H., *JBHI Feb. 2020 396-406*
Petersen, J., *see* Orting, S.N., *JBHI April 2020 1149-1159*
Petkov, N., *see* Martinez, E.T., *JBHI March 2020 866-877*
Petrone, P., *see* Casamitjana, A., *JBHI Feb. 2020 365-376*
Peulic, A., *see* Sustersic, T., *JBHI Jan. 2020 151-159*
Peulic, M., *see* Sustersic, T., *JBHI Jan. 2020 151-159*
Phang, C., Noman, F., Hussain, H., Ting, C., and Ombao, H., A Multi-Domain Connectome Convolutional Neural Network for Identifying Schizophrenia From EEG Connectivity Patterns; *JBHI May 2020 1333-1343*
Phillips, C., *see* Sridharan, M., *JBHI March 2020 747-759*
Piegari, R.I., *see* Batten, A.J., *JBHI June 2020 1780-1787*
Pinoli, P., *see* Ceddia, G., *JBHI Nov. 2020 3162-3172*
Pisani, A., *see* Ricci, M., *JBHI Jan. 2020 120-130*
Polec, J., *see* Kacur, J., *JBHI Nov. 2020 3055-3065*
Poon, C.C.Y., *see* Yu, R., *JBHI Feb. 2020 486-492*
Poostchi, M., *see* Yang, F., *JBHI May 2020 1427-1438*
Porter, E., *see* McDermott, B., *JBHI Aug. 2020 2407-2419*
Pottakkat, B., *see* Balagourouchetty, L., *JBHI June 2020 1686-1694*
Pottenburgh, J., *see* Wang, D., *JBHI Dec. 2020 3384-3396*
Pouyan, M.B., *see* Semiz, B., *JBHI July 2020 1899-1906*
Pradhapan, P., *see* Witteveen, J., *JBHI March 2020 735-746*
Prados, J.C., *see* Galvez, J.M., *JBHI July 2020 2119-2130*
Pragatheeswaran, J.K., *see* Balagourouchetty, L., *JBHI June 2020 1686-1694*
Pravadelli, G., *see* Demrozi, F., *JBHI Sept. 2020 2444-2451*
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Prieto, F., *see* Saint-Pierre, C., *JBHI Jan. 2020 319-329*
Primativo, S., *see* Mengoudi, K., *JBHI Nov. 2020 3066-3075*
Prodel, M., *see* De Oliveira, H., *JBHI Nov. 2020 3076-3084*
Protogerou, A.D., *see* Bikia, V., *JBHI July 2020 1968-1981*
Prupetkaew, P., *see* Silsupadol, P., *JBHI April 2020 1188-1195*
Pu, Y., *see* Li, J., *JBHI Oct. 2020 3012-3019*
Pueyo, E., *see* Sampedro-Puente, D.A., *JBHI March 2020 693-704*
Puig, D., *see* Martinez, E.T., *JBHI March 2020 866-877*
Putignano, D., *see* Terracciano, R., *JBHI Jan. 2020 226-234*

Q

Qadir, H.A., Balasingham, I., Solhusvik, J., Bergsland, J., Aabakken, L., and Shin, Y., Improving Automatic Polyp Detection Using CNN by Exploiting Temporal Dependency in Colonoscopy Video; *JBHI Jan. 2020 180-193*
Qi, L., *see* Jiao, C., *JBHI Oct. 2020 3002-3011*
Qi, W., and Aliverti, A., A Multimodal Wearable System for Continuous and Real-Time Breathing Pattern Monitoring During Daily Activity; *JBHI Aug. 2020 2199-2207*
Qi, Y., *see* Zhou, Z., *JBHI April 2020 943-956*
Qian, K., *see* Zhang, Z., *JBHI Jan. 2020 300-310*
Qian, K., *see* Dong, F., *JBHI July 2020 2082-2092*
Qian, T., *see* Li, Y., *JBHI Oct. 2020 2787-2797*
Qian, X., Fu, H., Shi, W., Chen, T., Fu, Y., Shan, F., and Xue, X., M^3Lung-Sys: A Deep Learning System for Multi-Class Lung Pneumonia Screening From CT Imaging; *JBHI Dec. 2020 3539-3550*
Qian, Y., *see* Ye, Y., *JBHI Oct. 2020 2755-2764*
Qiao, L., *see* Li, W., *JBHI April 2020 1160-1168*
Qiao, R., Luo, X., Zhu, S., Liu, A., Yan, X., and Wang, Q., Dynamic Autonomous Cross Consortium Chain Mechanism in e-Healthcare; *JBHI Aug. 2020 2157-2168*
Qiao, Y., *see* Sarabi, M.S., *JBHI Dec. 2020 3466-3479*
Qin, G., *see* Zhou, Z., *JBHI Jan. 2020 194-204*
Qin, P., Wu, K., Hu, Y., Zeng, J., and Chai, X., Diagnosis of Benign and Malignant Thyroid Nodules Using Combined Conventional Ultrasound and Ultrasound Elasticity Imaging; *JBHI April 2020 1028-1036*
Qin, X., *see* Zhang, S., *JBHI April 2020 965-973*
Qiu, H., Qiu, M., Liu, M., and Memmi, G., Secure Health Data Sharing for Medical Cyber-Physical Systems for the Healthcare 4.0; *JBHI Sept. 2020 2499-2505*
Qiu, J., *see* Lo, F.P.W., *JBHI July 2020 1926-1939*
Qiu, M., *see* Qiu, H., *JBHI Sept. 2020 2499-2505*
Qiu, R.G., *see* Wang, T., *JBHI Aug. 2020 2337-2346*
Qiu, R.G., *see* Chen, D., *JBHI May 2020 1469-1476*
Qiu, T., *see* Liu, X., *JBHI Aug. 2020 2177-2188*
Qiu, X., *see* Meng, L., *JBHI Dec. 2020 3576-3584*
Qu, W., Wang, Z., Hong, H., Chi, Z., Feng, D.D., Grunstein, R., and Gordon, C., A Residual Based Attention Model for EEG Based Sleep Staging; *JBHI Oct. 2020 2833-2843*
Quero, J.M., *see* Hamad, R.A., *JBHI Feb. 2020 387-395*
Quinton, J., *see* Hua, A., *JBHI Sept. 2020 2452-2460*

R

Radeva, P., *see* Martinez, E.T., *JBHI March 2020 866-877*
Raffo, L., *see* Macis, S., *JBHI Jan. 2020 268-279*
Rahman, S.A., and Adjeroh, D.A., Centroid of Age Neighborhoods: A New Approach to Estimate Biological Age; *JBHI April 2020 1226-1234*
Rahmani, A.M., *see* Yang, G., *JBHI Sept. 2020 2535-2549*
Rahmani, A.M., *see* Yang, G., *JBHI Sept. 2020 2442-2443*
Rahmim, A., *see* Lv, W., *JBHI Aug. 2020 2268-2277*
Ramirez, J., *see* Martinez-Murcia, F.J., *JBHI Jan. 2020 17-26*
Ramkissoon, C.M., Bertachi, A., Beneyto, A., Bondia, J., and Vehi, J., Detection and Control of Unannounced Exercise in the Artificial Pancreas Without Additional Physiological Signals; *JBHI Jan. 2020 259-267*
Ramkumar, G., *see* Balagourouchetty, L., *JBHI June 2020 1686-1694*
Ramos, I., *see* Aresta, G., *JBHI Oct. 2020 2894-2901*
Ran, A., *see* Wang, X., *JBHI Dec. 2020 3431-3442*
Ranchal, R., Bastide, P., Wang, X., Gkoulalas-Divanis, A., Mehra, M., Bakthavachalam, S., Lei, H., and Mohindra, A., Disrupting Healthcare Silos: Addressing Data Volume, Velocity and Variety With a Cloud-Native Healthcare Data Ingestion Service; *JBHI Nov. 2020 3182-3188*
Rankovic, V., *see* Sustersic, T., *JBHI Jan. 2020 151-159*
Rashid, M., *see* Montaser, E., *JBHI July 2020 2064-2072*
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Ray, N.J., *see* Madan, H., *JBHI Feb. 2020 396-406*
Rea, T.D., *see* Coult, J., *JBHI March 2020 768-774*
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Reddy, M., *see* Guemes, A., *JBHI May 2020 1439-1446*
Regensburger, M., *see* Martindale, C.F., *JBHI May 2020 1490-1499*
Rehg, J.M., *see* Semiz, B., *JBHI July 2020 1899-1906*
Reiman, D., Metwally, A.A., Sun, J., and Dai, Y., PopPhy-CNN: A Phylogenetic Tree Embedded Architecture for Convolutional Neural Networks to Predict Host Phenotype From Metagenomic Data; *JBHI Oct. 2020 2993-3001*
Rekik, I., *see* Adeli, E., *JBHI Feb. 2020 333-335*
Ren, H., *see* Wu, D., *JBHI Dec. 2020 3529-3538*
Ren, J., Yan, Y., Zhao, H., Ma, P., Zabalza, J., Hussain, Z., Luo, S., Dai, Q., Zhao, S., Sheikh, A., Hussain, A., and Li, H., A Novel Intelligent Computational Approach to Model Epidemiological Trends and Assess the Impact of Non-Pharmacological Interventions for COVID-19; *JBHI Dec. 2020 3551-3563*
Ren, Y., Shi, Y., Zhang, K., Chen, Z., and Yan, Z., Medical Treatment Migration Prediction Based on GCN via Medical Insurance Data; *JBHI Sept. 2020 2516-2522*
Ren, Z., *see* Dong, F., *JBHI July 2020 2082-2092*
Ren, Z., *see* Xue, X., *JBHI Feb. 2020 377-386*
Rexachs, D., *see* Shojaei, E., *JBHI Sept. 2020 2490-2498*
Rey-Area, M., *see* Tabik, S., *JBHI Dec. 2020 3595-3605*
Ricci, M., Di Lazzaro, G., Pisani, A., Mercuri, N.B., Giannini, F., and Saggio, G., Assessment of Motor Impairments in Early Untreated Parkinson's Disease Patients: The Wearable Electronics Impact; *JBHI Jan. 2020 120-130*
Rivera, D., *see* Hasan, S., *JBHI July 2020 1952-1967*
Rivera-Romero, O., *see* Monteiro-Guerra, F., *JBHI June 2020 1738-1751*
Roberson, S.W., *see* Baldassano, S.N., *JBHI Aug. 2020 2389-2397*

Rodrigues, E.O., Conci, A., and Liatsis, P., ELEMENT: Multi-Modal Retinal Vessel Segmentation Based on a Coupled Region Growing and Machine Learning Approach; *JBHI Dec. 2020 3507-3519*
Rodriguez-Fernandez, M., *see* Fresard, M.E., *JBHI May 2020 1500-1508*
Roguski, L., *see* Tissot, H.C., *JBHI Oct. 2020 2950-2959*
Rohde, G.K., *see* Zhuang, Y., *JBHI Aug. 2020 2260-2267*
Rojas, I., *see* Galvez, J.M., *JBHI July 2020 2119-2130*
Romao, L., *see* Tissot, H.C., *JBHI Oct. 2020 2950-2959*
Romeo, L., *see* Bernardini, M., *JBHI Jan. 2020 235-246*
Romo-Bucheli, D., Erfurth, U.S., and Bogunovic, H., End-to-End Deep Learning Model for Predicting Treatment Requirements in Neovascular AMD From Longitudinal Retinal OCT Imaging; *JBHI Dec. 2020 3456-3465*
Roop, P.S., *see* Ai, W., *JBHI June 2020 1579-1588*
Rosa, B.G., *see* Chen, C., *JBHI Aug. 2020 2208-2215*
Rosales, N., *see* Moscoso-Vasquez, M., *JBHI Sept. 2020 2681-2689*
Rosland, A., *see* Batten, A.J., *JBHI June 2020 1780-1787*
Rossetti, P., *see* Montaser, E., *JBHI July 2020 2064-2072*
Roth, N., *see* Martindale, C.F., *JBHI May 2020 1490-1499*
Rouast, P.V., and Adam, M.T.P., Learning Deep Representations for Video-Based Intake Gesture Detection; *JBHI June 2020 1727-1737*
Roy, S., *see* Whaiduzzaman, M., *JBHI Dec. 2020 3564-3575*
Rubin, D., *see* Hoogi, A., *JBHI Sept. 2020 2711-2717*
Rubin, D.L., *see* Ma, X., *JBHI Dec. 2020 3443-3455*
Rundensteiner, E., *see* Tlachac, M., *JBHI Nov. 2020 3326-3332*
Russo, G., *see* Viceconti, M., *JBHI Jan. 2020 4-13*
Ryu, J.L., *see* Dikici, E., *JBHI Oct. 2020 2883-2893*

S

S., A.A., P., S., V., S., S., S.K., A., S., Akl, T.J., P., P.S., and Sivaprakasam, M., Electrodermal Activity Based Pre-surgery Stress Detection Using a Wrist Wearable; *JBHI Jan. 2020 92-100*
S., S.K., *see* S., A.A., *JBHI Jan. 2020 92-100*
Saadatnejad, S., Oveisi, M., and Hashemi, M., LSTM-Based ECG Classification for Continuous Monitoring on Personal Wearable Devices; *JBHI Feb. 2020 515-523*
Saavedra-Pena, G., *see* Lai, H., *JBHI March 2020 885-897*
Saba, E., *see* Elkholy, A., *JBHI Jan. 2020 280-291*
Saba, L., *see* Wu, D., *JBHI Dec. 2020 3529-3538*
Sacco, A., Esposito, F., Marchetto, G., Kolar, G., and Schwetye, K., On Edge Computing for Remote Pathology Consultations and Computations; *JBHI Sept. 2020 2523-2534*
Sadiq, A.S., *see* Hosseini, E., *JBHI Oct. 2020 2765-2775*
Saeedi, O., *see* Wang, D., *JBHI Dec. 2020 3384-3396*
Saggio, G., *see* Ricci, M., *JBHI Jan. 2020 120-130*
Saha, S., *see* Mitra, S., *JBHI Nov. 2020 3315-3325*
Sahakian, A.V., *see* Besler, E., *JBHI Aug. 2020 2359-2367*
Saint-Pierre, C., Prieto, F., Herskovic, V., and Sepulveda, M., Team Collaboration Networks and Multidisciplinarity in Diabetes Care: Implications for Patient Outcomes; *JBHI Jan. 2020 319-329*
Salcudean, S.E., *see* Karimi, D., *JBHI May 2020 1413-1426*
Salleh, S., *see* Noman, F., *JBHI March 2020 705-716*
Saltz, J.H., *see* Panayides, A.S., *JBHI July 2020 1837-1857*
Salur, G., *see* Tunca, C., *JBHI July 2020 1994-2005*
Samdin, S.B., *see* Noman, F., *JBHI March 2020 705-716*
Sampedro-Puente, D.A., Fernandez-Bes, J., Virag, L., Varro, A., and Pueyo, E., Data-Driven Identification of Stochastic Model Parameters and State Variables: Application to the Study of Cardiac Beat-to-Beat Variability; *JBHI March 2020 693-704*
Samset, E., *see* Andreassen, B.S., *JBHI April 2020 994-1003*
Sanchez, M.B., *see* Loram, I., *JBHI April 2020 1016-1027*
Sanchez-Pena, R., *see* Moscoso-Vasquez, M., *JBHI Sept. 2020 2681-2689*
Sandu, A.L., *see* de Vries, C.F., *JBHI Feb. 2020 586-593*
Sanginario, A., *see* Terracciano, R., *JBHI Jan. 2020 226-234*
Sappey-Marinier, D., *see* Stamile, C., *JBHI April 2020 1137-1148*
Sarabi, M.S., Khansari, M.M., Zhang, J., Kushner-Lenhoff, S., Gahm, J.K., Qiao, Y., Kashani, A.H., and Shi, Y., 3D Retinal Vessel Density Mapping With OCT-Angiography; *JBHI Dec. 2020 3466-3479*
Sarhan, M.H., Nasseri, M.A., Zapp, D., Maier, M., Lohmann, C.P., Navab, N., and Eslami, A., Machine Learning Techniques for Ophthalmic Data Processing: A Review; *JBHI Dec. 2020 3338-3350*
Sarker, M.M.K., *see* Martinez, E.T., *JBHI March 2020 866-877*
Sarrafzadeh, M., *see* Darabi, S., *JBHI Nov. 2020 3268-3275*
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Satoh, S., *see* Meng, Q., *JBHI Dec. 2020 3351-3361*
Savary, M., *see* Soltani, A., *JBHI March 2020 658-668*
Savoie, P., Cameron, J.A.D., Kaye, M.E., and Scheme, E.J., Automation of the Timed-Up-and-Go Test Using a Conventional Video Camera; *JBHI April 2020 1196-1205*
Schatz, B., *see* Hua, A., *JBHI Sept. 2020 2452-2460*
Scheid, B., *see* Baldassano, S.N., *JBHI Aug. 2020 2389-2397*
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Schinkel, M., *see* Paranjape, K., *JBHI July 2020 1860-1863*
Schipper, F., *see* Eerikainen, L.M., *JBHI June 2020 1610-1618*
Schmitter-Edgecombe, M., *see* Aminikhanghahi, S., *JBHI April 2020 1206-1214*
Schnabel, J.A., *see* Shan, C., *JBHI April 2020 929-930*
Schott, J.M., *see* Mengoudi, K., *JBHI Nov. 2020 3066-3075*
Schuller, B., *see* Zhang, Z., *JBHI Jan. 2020 300-310*
Schuller, B.W., *see* Dong, F., *JBHI July 2020 2082-2092*
Schuman, J.S., *see* George, Y., *JBHI Dec. 2020 3421-3430*
Schwetye, K., *see* Sacco, A., *JBHI Sept. 2020 2523-2534*
Seese, L., *see* Movahedi, F., *JBHI Aug. 2020 2347-2358*
Seko, S., *see* Matthew, R.P., *JBHI Nov. 2020 3285-3294*
Selby, V., *see* Semiz, B., *JBHI July 2020 1899-1906*
Semiz, B., *see* Zia, J., *JBHI April 2020 1080-1092*
Semiz, B., Hersek, S., Pouyan, M.B., Partida, C., Blazquez-Arroyo, L., Selby, V., Wieselthaler, G., Rehg, J.M., Klein, L., and Inan, O.T., Detecting Suspected Pump Thrombosis in Left Ventricular Assist Devices via Acoustic Analysis; *JBHI July 2020 1899-1906*
Semiz, B., *see* Hersek, S., *JBHI May 2020 1296-1309*
Senek, M., *see* Aghanavesi, S., *JBHI Jan. 2020 111-119*
Sepehri, M.M., *see* Nakhaei, A., *JBHI Nov. 2020 3295-3307*
Sepulveda, M., *see* Saint-Pierre, C., *JBHI Jan. 2020 319-329*
Sevillano-Garcia, I., *see* Tabik, S., *JBHI Dec. 2020 3595-3605*
Shadpour, P., *see* Nakhaei, A., *JBHI Nov. 2020 3295-3307*
Shae, Z., *see* Zhuang, Y., *JBHI Aug. 2020 2169-2176*
Shafqat, N., *see* Yaqoob, T., *JBHI June 2020 1752-1761*
Shah, A.D., *see* Tissot, H.C., *JBHI Oct. 2020 2950-2959*
Shah, A.J., *see* Gurel, N.Z., *JBHI July 2020 1917-1925*
Sham, P., *see* Wang, H., *JBHI June 2020 1814-1822*
Shamout, F.E., Zhu, T., Sharma, P., Watkinson, P.J., and Clifton, D.A., Deep Interpretable Early Warning System for the Detection of Clinical Deterioration; *JBHI Feb. 2020 437-446*
Shan, C., Tan, T., Wu, S., and Schnabel, J.A., Guest Editorial: Deep Learning in Ultrasound Imaging; *JBHI April 2020 929-930*
Shan, F., *see* Sun, L., *JBHI Oct. 2020 2798-2805*
Shan, F., *see* Qian, X., *JBHI Dec. 2020 3539-3550*
Shandhi, M.M.H., *see* Zia, J., *JBHI April 2020 1080-1092*
Shandhi, M.M.H., *see* Yao, Y., *JBHI Jan. 2020 69-78*
Shandhi, M.M.H., *see* Hersek, S., *JBHI May 2020 1296-1309*
Shang, C., Chang, C., Chen, G., Zhao, S., and Chen, H., BIA: Behavior Identification Algorithm Using Unsupervised Learning Based on Sensor Data for Home Elderly; *JBHI June 2020 1589-1600*
Shang, C., Chang, C., Chen, G., Zhao, S., and Lin, J., Implicit Irregularity Detection Using Unsupervised Learning on Daily Behaviors; *JBHI Jan. 2020 131-143*
Shang, S., *see* Zhang, S., *JBHI April 2020 965-973*
Shao, W., *see* Sun, L., *JBHI Oct. 2020 2798-2805*
Shao, Y., *see* Zhang, T., *JBHI July 2020 1940-1951*
Sharma, A., *see* Panayides, A.S., *JBHI July 2020 1837-1857*
Sharma, P., *see* Shamout, F.E., *JBHI Feb. 2020 437-446*

Sheets, L.R., *see* Zhuang, Y., *JBHI Aug. 2020 2169-2176*
Sheikh, A., *see* Ren, J., *JBHI Dec. 2020 3551-3563*
Shen, D., *see* Li, W., *JBHI April 2020 1160-1168*
Shen, D., *see* Sun, L., *JBHI Oct. 2020 2798-2805*
Shen, D., *see* Hu, D., *JBHI Jan. 2020 214-225*
Shen, D., *see* Yang, W., *JBHI Aug. 2020 2278-2291*
Shen, D., *see* Adeli, E., *JBHI Feb. 2020 333-335*
Shi, F., *see* Sun, L., *JBHI Oct. 2020 2798-2805*
Shi, K., *see* Hu, X., *JBHI Sept. 2020 2599-2608*
Shi, W., *see* Qian, X., *JBHI Dec. 2020 3539-3550*
Shi, Y., *see* Ren, Y., *JBHI Sept. 2020 2516-2522*
Shi, Y., *see* Yang, W., *JBHI Aug. 2020 2278-2291*
Shi, Y., *see* Sarabi, M.S., *JBHI Dec. 2020 3466-3479*
Shi, Y., *see* He, Y., *JBHI Feb. 2020 493-502*
Shih, Y., *see* Lin, B., *JBHI April 2020 1037-1045*
Shin, Y., *see* Qadir, H.A., *JBHI Jan. 2020 180-193*
Shojaei, E., Wong, A., Rexachs, D., Epelde, F., and Luque, E., A Method for Projections of the Emergency Department Behaviour by Non-Communicable Diseases From 2019 to 2039; *JBHI Sept. 2020 2490-2498*
Shovon, A.R., *see* Whaiduzzaman, M., *JBHI Dec. 2020 3564-3575*
Shrey, D.W., *see* Smith, R.J., *JBHI April 2020 1070-1079*
Shufelt, C., *see* Meng, Y., *JBHI March 2020 878-884*
Shyr, Y., *see* Teng, J., *JBHI Feb. 2020 354-364*
Shyu, C., *see* Zhuang, Y., *JBHI Aug. 2020 2169-2176*
Shyu, C., *see* Liu, D., *JBHI May 2020 1456-1468*
Siddique, A., *see* Loram, I., *JBHI April 2020 1016-1027*
Sikdar, S., *see* Guan, S., *JBHI Feb. 2020 568-576*
Silamut, K., *see* Yang, F., *JBHI May 2020 1427-1438*
Silsupadol, P., Prupetkaew, P., Kamnardsiri, T., and Lugade, V., Smartphone-Based Assessment of Gait During Straight Walking, Turning, and Walking Speed Modulation in Laboratory and Free-Living Environments; *JBHI April 2020 1188-1195*
Silva, A.C., *see* da Cruz, L.B., *JBHI Dec. 2020 3491-3498*
Silva, J., Sousa, I., and Cardoso, J.S., Fusion of Clinical, Self-Reported, and Multisensor Data for Predicting Falls; *JBHI Jan. 2020 50-56*
Silverdale, M., *see* Loram, I., *JBHI April 2020 1016-1027*
Sima, C., *see* Vundavilli, H., *JBHI Aug. 2020 2430-2438*
Sir, M., *see* Xian, X., *JBHI Oct. 2020 3029-3037*
Sitek, A., *see* Ying, J., *JBHI June 2020 1805-1813*
Sivaprakasam, M., *see* S., A.A., *JBHI Jan. 2020 92-100*
Slone, W., *see* Dikici, E., *JBHI Oct. 2020 2883-2893*
Smith, R.J., Ombao, H.C., Shrey, D.W., and Lopour, B.A., Inference on Long-Range Temporal Correlations in Human EEG Data; *JBHI April 2020 1070-1079*
Smolejova, E., *see* Kacur, J., *JBHI Nov. 2020 3055-3065*
Sodini, C.G., *see* Lai, H., *JBHI March 2020 885-897*
Sodini, C.G., *see* Liu, J., *JBHI Feb. 2020 533-542*
Sokunbi, M.O., *see* de Vries, C.F., *JBHI Feb. 2020 586-593*
Solberg, A.H.S., *see* Andreassen, B.S., *JBHI April 2020 994-1003*
Solhusvik, J., *see* Qadir, H.A., *JBHI Jan. 2020 180-193*
Solinas, G., *see* Macis, S., *JBHI Jan. 2020 268-279*
Solis Castilla, R., *see* Akbari, A., *JBHI Sept. 2020 2639-2650*
Soltani, A., Dejnabadi, H., Savary, M., and Aminian, K., Real-World Gait Speed Estimation Using Wrist Sensor: A Personalized Approach; *JBHI March 2020 658-668*
Song, B., *see* Sun, L., *JBHI Oct. 2020 2798-2805*
Song, C., *see* Zhu, H., *JBHI June 2020 1652-1663*
Song, E., *see* Cao, H., *JBHI July 2020 2006-2015*
Song, L., Lin, J., Wang, Z.J., and Wang, H., An End-to-End Multi-Task Deep Learning Framework for Skin Lesion Analysis; *JBHI Oct. 2020 2912-2921*
Song, M., *see* Zhao, Y., *JBHI Oct. 2020 2942-2949*
Song, W., *see* Ye, Y., *JBHI Oct. 2020 2755-2764*
Song, W., *see* Clemente, J., *JBHI Feb. 2020 524-532*
Soulis, D., *see* Bikia, V., *JBHI July 2020 1968-1981*
Sousa, F.R.C., *see* de Figueiredo, R.P., *JBHI Sept. 2020 2718-2725*
Sousa, I., *see* Silva, J., *JBHI Jan. 2020 50-56*
Southerland, A.M., *see* Zhuang, Y., *JBHI Aug. 2020 2260-2267*
Souza, J.C., *see* da Cruz, L.B., *JBHI Dec. 2020 3491-3498*
Speier, W., *see* Meng, Y., *JBHI March 2020 878-884*
Speranza, C.G., da Ponte, D.F., da Rocha, C.A.F., and Moraes, R., Blind Equalization of Lung Crackle Sounds to Compensate Chest Attenuation; *JBHI June 2020 1796-1804*
Spicher, N., and Kukuk, M., Delineation of Electrocardiograms Using Multi-scale Parameter Estimation; *JBHI Aug. 2020 2216-2229*
Spiclin, Z., *see* Madan, H., *JBHI Feb. 2020 396-406*
Spiegel, B., *see* Meng, Y., *JBHI March 2020 878-884*
Spolaor, S., *see* Nobile, M.S., *JBHI Nov. 2020 3173-3181*
Sridharan, M., Bigham, J., Campbell, P.M., Phillips, C., and Bodanese, E., Inferring Micro-Activities Using Wearable Sensing for ADL Recognition of Home-Care Patients; *JBHI March 2020 747-759*
Sridharan, S., *see* Fernando, T., *JBHI June 2020 1601-1609*
Srivastava, G., *see* Yazdinejad, A., *JBHI Aug. 2020 2146-2156*
Staff, R.T., *see* de Vries, C.F., *JBHI Feb. 2020 586-593*
Stamile, C., Cotton, F., Sappey-Marinier, D., and Van Huffel, S., Constrained Tensor Decomposition for Longitudinal Analysis of Diffusion Imaging Data; *JBHI April 2020 1137-1148*
Stavdahl, O., *see* Kolle, K., *JBHI Feb. 2020 594-602*
Stergiopulos, N., *see* Bikia, V., *JBHI July 2020 1968-1981*
Su, E., *see* Cai, S., *JBHI Sept. 2020 2630-2638*
Su, J., *see* Sun, Y., *JBHI Nov. 2020 3236-3247*
Su, Y., *see* Lai, D., *JBHI June 2020 1569-1578*
Su, Y., *see* Lu, Y., *JBHI May 2020 1367-1378*
Su, Z., *see* Lin, L., *JBHI Nov. 2020 3248-3257*
Suarez, J.L., *see* Tabik, S., *JBHI Dec. 2020 3595-3605*
Sugita, N., Akay, M., Akay, Y.M., and Yoshizawa, M., Noise Reduction Technique for Single-Color Video Plethysmography Using Singular Spectrum Analysis; *JBHI June 2020 1788-1795*
Sui, H., *see* Sun, L., *JBHI Oct. 2020 2798-2805*
Sumkin, J., *see* Hao, D., *JBHI Sept. 2020 2701-2710*
Sun, C., Xu, A., Liu, D., Xiong, Z., Zhao, F., and Ding, W., Deep Learning-Based Classification of Liver Cancer Histopathology Images Using Only Global Labels; *JBHI June 2020 1643-1651*
Sun, C., Chen, C., Li, W., Fan, J., and Chen, W., A Hierarchical Neural Network for Sleep Stage Classification Based on Comprehensive Feature Learning and Multi-Flow Sequence Learning; *JBHI May 2020 1351-1366*
Sun, H., Zeng, X., Xu, T., Peng, G., and Ma, Y., Computer-Aided Diagnosis in Histopathological Images of the Endometrium Using a Convolutional Neural Network and Attention Mechanisms; *JBHI June 2020 1664-1676*
Sun, J., *see* Reiman, D., *JBHI Oct. 2020 2993-3001*
Sun, L., Mo, Z., Yan, F., Xia, L., Shan, F., Ding, Z., Song, B., Gao, W., Shao, W., Shi, F., Yuan, H., Jiang, H., Wu, D., Wei, Y., Gao, Y., Sui, H., Zhang, D., and Shen, D., Adaptive Feature Selection Guided Deep Forest for COVID-19 Classification With Chest CT; *JBHI Oct. 2020 2798-2805*
Sun, L., Wang, J., Huang, Y., Ding, X., Greenspan, H., and Paisley, J., An Adversarial Learning Approach to Medical Image Synthesis for Lesion Detection; *JBHI Aug. 2020 2303-2314*
Sun, M., *see* Luo, Y., *JBHI Dec. 2020 3374-3383*
Sun, R., *see* Bridge, J., *JBHI Oct. 2020 2776-2786*
Sun, S., *see* Ye, Y., *JBHI Oct. 2020 2755-2764*
Sun, W., *see* Li, Y., *JBHI Oct. 2020 2787-2797*
Sun, Y., *see* Lo, F.P.W., *JBHI July 2020 1926-1939*
Sun, Y., Niu, S., Gao, X., Su, J., Dong, J., Chen, Y., and Wang, L., Adaptive-Guided-Coupling-Probability Level Set for Retinal Layer Segmentation; *JBHI Nov. 2020 3236-3247*
Sun, Z., *see* Duan, H., *JBHI July 2020 2053-2063*
Sun, Z., *see* Niu, J., *JBHI May 2020 1321-1332*
Sung, S., Lin, C., and Hu, Y., EMR-Based Phenotyping of Ischemic Stroke Using Supervised Machine Learning and Text Mining Techniques; *JBHI Oct. 2020 2922-2931*
Sustersic, T., Rankovic, V., Peulic, M., and Peulic, A., An Early Disc Herniation Identification System for Advancement in the Standard Medical Screening Procedure Based on Bayes Theorem; *JBHI Jan. 2020 151-159*
Swaminathan, D., *see* Acharya, S., *JBHI June 2020 1717-1726*
Swaminathan, D., *see* Acharya, S., *JBHI Sept. 2020 2726*

+ Check author entry for coauthors

Sze, V., *see* Lai, H., *JBHI March 2020 885-897*

T

Tabik, S., Gomez-Rios, A., Martin-Rodriguez, J.L., Sevillano-Garcia, I., Rey-Area, M., Charte, D., Guirado, E., Suarez, J.L., Luengo, J., Valero-Gonzalez, M.A., Garcia-Villanova, P., Olmedo-Sanchez, E., and Herrera, F., COVIDGR Dataset and COVID-SDNet Methodology for Predicting COVID-19 Based on Chest X-Ray Images; *JBHI Dec. 2020 3595-3605*

Tadesse, G.A., Javed, H., Thanh, N.L.N., Thi, H.D.H., Tan, L.V., Thwaites, L., Clifton, D.A., and Zhu, T., Multi-Modal Diagnosis of Infectious Diseases in the Developing World; *JBHI July 2020 2131-2141*

Tadesse, G.A., *see* Kiyasseh, D., *JBHI Nov. 2020 3226-3235*

Tai, Y., *see* Lin, G., *JBHI July 2020 1907-1916*

Tak, W.Y., *see* Wu, D., *JBHI Dec. 2020 3529-3538*

Takahashi, M., *see* Eguchi, R., *JBHI May 2020 1276-1283*

Talari, H., *see* Wu, D., *JBHI Dec. 2020 3529-3538*

Tam, J., *see* Liu, J., *JBHI Dec. 2020 3520-3528*

Tamburin, S., *see* Demrozi, F., *JBHI Sept. 2020 2444-2451*

Tan, H., *see* Du, J., *JBHI April 2020 1169-1179*

Tan, L.V., *see* Tadesse, G.A., *JBHI July 2020 2131-2141*

Tan, T., *see* Shan, C., *JBHI April 2020 929-930*

Tang, F., *see* Wang, X., *JBHI Dec. 2020 3431-3442*

Tang, J., *see* Li, J., *JBHI Oct. 2020 3012-3019*

Tang, P., Liang, Q., Yan, X., Xiang, S., and Zhang, D., GP-CNN-DTEL: Global-Part CNN Model With Data-Transformed Ensemble Learning for Skin Lesion Classification; *JBHI Oct. 2020 2870-2882*

Tang, W., *see* Xu, Q., *JBHI Sept. 2020 2481-2489*

Tang, Y., *see* Mahmoud, S.S., *JBHI Nov. 2020 3191-3202*

Tang, Y., *see* Niu, J., *JBHI May 2020 1321-1332*

Tang, Z., *see* Wang, X., *JBHI Dec. 2020 3431-3442*

Tao, R., *see* Huang, Q., *JBHI Jan. 2020 160-170*

Tao, X., *see* Lin, L., *JBHI Nov. 2020 3248-3257*

Tao, Y., *see* Wang, D., *JBHI Dec. 2020 3384-3396*

Telfer, B., *see* Chen, W., *JBHI July 2020 1858-1859*

Telleria-Orriols, C., *see* Gonzalez-Garcia, J., *JBHI Sept. 2020 2671-2680*

Temel, D., Mathew, M.J., AlRegib, G., and Khalifa, Y.M., Relative Afferent Pupillary Defect Screening Through Transfer Learning; *JBHI March 2020 788-795*

Teng, F., *see* Xu, Q., *JBHI Sept. 2020 2481-2489*

Teng, F., Ma, Z., Chen, J., Xiao, M., and Huang, L., Automatic Medical Code Assignment via Deep Learning Approach for Intelligent Healthcare; *JBHI Sept. 2020 2506-2515*

Teng, J., Abdygametova, A., Du, J., Ma, B., Zhou, R., Shyr, Y., and Ye, F., Bayesian Inference of Lymph Node Ratio Estimation and Survival Prognosis for Breast Cancer Patients; *JBHI Feb. 2020 354-364*

Terracciano, R., Sanginario, A., Barbero, S., Putignano, D., Canavese, L., and Demarchi, D., Pattern-Reversal Visual Evoked Potential on Smart Glasses; *JBHI Jan. 2020 226-234*

Thanh, N.L.N., *see* Tadesse, G.A., *JBHI July 2020 2131-2141*

Thi, H.D.H., *see* Tadesse, G.A., *JBHI July 2020 2131-2141*

Thomsen, L.H., *see* Orting, S.N., *JBHI April 2020 1149-1159*

Thorpe, J., *see* Batten, A.J., *JBHI June 2020 1780-1787*

Thwaites, L., *see* Tadesse, G.A., *JBHI July 2020 2131-2141*

Thwaites, L., *see* Kiyasseh, D., *JBHI Nov. 2020 3226-3235*

Tian, J., *see* Cheng, J., *JBHI Dec. 2020 3335-3337*

Tian, J., *see* Li, C., *JBHI Dec. 2020 3585-3594*

Tian, J., *see* Meng, L., *JBHI Dec. 2020 3576-3584*

Tian, Y., *see* Wang, T., *JBHI Aug. 2020 2337-2346*

Ting, C., *see* Noman, F., *JBHI March 2020 705-716*

Ting, C., *see* Phang, C., *JBHI May 2020 1333-1343*

Tissot, H.C., Shah, A.D., Brealey, D., Harris, S., Agbakoba, R., Folarin, A., Romao, L., Roguski, L., Dobson, R., and Asselbergs, F.W., Natural Language Processing for Mimicking Clinical Trial Recruitment in Critical Care: A Semi-Automated Simulation Based on the LeoPARDS Trial; *JBHI Oct. 2020 2950-2959*

Tjurin, P., *see* Farrahi, V., *JBHI Jan. 2020 27-38*

Tlachac, M., and Rundensteiner, E., Screening For Depression With Retrospectively Harvested Private Versus Public Text; *JBHI Nov. 2020 3326-3332*

Tomiyama, N., *see* Xu, R., *JBHI July 2020 2041-2052*

Tong, T., *see* Wang, H., *JBHI June 2020 1814-1822*

Torkamani-Azar, M., Kanik, S.D., Aydin, S., and Cetin, M., Prediction of Reaction Time and Vigilance Variability From Spatio-Spectral Features of Resting-State EEG in a Long Sustained Attention Task; *JBHI Sept. 2020 2550-2558*

Toumazou, C., *see* Liu, X., *JBHI Nov. 2020 3276-3284*

Tourassi, G., *see* Hasan, S., *JBHI July 2020 1952-1967*

Toyras, J., *see* Korkalainen, H., *JBHI July 2020 2073-2081*

Trachet, B., *see* Bikia, V., *JBHI July 2020 1968-1981*

Trew, M.L., *see* Ai, W., *JBHI June 2020 1579-1588*

Truong, N.D., *see* Liu, T., *JBHI Oct. 2020 2844-2851*

Tsaftaris, S.A., *see* Panayides, A.S., *JBHI July 2020 1837-1857*

Tsai, C., *see* Tsai, K., *JBHI Nov. 2020 3203-3214*

Tsai, J.J., *see* Zhuang, Y., *JBHI Aug. 2020 2169-2176*

Tsai, K., Wang, W., Cheng, C., Tsai, C., Wang, J., Lin, T., Fang, S., Chen, L., and Tsao, Y., Blind Monaural Source Separation on Heart and Lung Sounds Based on Periodic-Coded Deep Autoencoder; *JBHI Nov. 2020 3203-3214*

Tsao, Y., *see* Tsai, K., *JBHI Nov. 2020 3203-3214*

Tsouri, G.R., *see* Dautov, R., *JBHI May 2020 1246-1254*

Tu, Y., *see* Lin, B., *JBHI April 2020 1037-1045*

Tunca, C., Salur, G., and Ersoy, C., Deep Learning for Fall Risk Assessment With Inertial Sensors: Utilizing Domain Knowledge in Spatio-Temporal Gait Parameters; *JBHI July 2020 1994-2005*

Tzioufas, A., *see* Vukicevic, A.M., *JBHI March 2020 835-843*

Tzovaras, D., *see* Zacharaki, E.I., *JBHI June 2020 1557-1568*

U

Ulgheri, A., *see* Macis, S., *JBHI Jan. 2020 268-279*

Ullrich, M., Kuderle, A., Hannink, J., Din, S.D., Gasner, H., Marxreiter, F., Klucken, J., Eskofier, B.M., and Kluge, F., Detection of Gait From Continuous Inertial Sensor Data Using Harmonic Frequencies; *JBHI July 2020 1869-1878*

Uribe, O., *see* Zhuang, Y., *JBHI Aug. 2020 2260-2267*

V

V., S., *see* S., A.A., *JBHI Jan. 2020 92-100*

Vaccarino, V., *see* Gurel, N.Z., *JBHI July 2020 1917-1925*

Valenti, G., *see* Lueken, M., *JBHI July 2020 1879-1886*

Valenzuela, O., *see* Galvez, J.M., *JBHI July 2020 2119-2130*

Valero, M., *see* Clemente, J., *JBHI Feb. 2020 524-532*

Valero-Gonzalez, M.A., *see* Tabik, S., *JBHI Dec. 2020 3595-3605*

Van, M.T., *see* Li, H., *JBHI April 2020 974-983*

van der Schaar, M., *see* Yoon, J., *JBHI Aug. 2020 2378-2388*

van der Schaar, M., *see* Jarrett, D., *JBHI Feb. 2020 424-436*

Van Huffel, S., *see* Stamile, C., *JBHI April 2020 1137-1148*

van Pul, C., *see* Joshi, R., *JBHI March 2020 681-692*

van Sloun, R.J.G., and Demi, L., Localizing B-Lines in Lung Ultrasonography by Weakly Supervised Deep Learning, *In-Vivo* Results; *JBHI April 2020 957-964*

Van Steenkiste, T., Groenendaal, W., Dreesen, P., Lee, S., Klerkx, S., de Francisco, R., Deschrijver, D., and Dhaene, T., Portable Detection of Apnea and Hypopnea Events Using Bio-Impedance of the Chest and Deep Learning; *JBHI Sept. 2020 2589-2598*

Van Tan, L., *see* Kiyasseh, D., *JBHI Nov. 2020 3226-3235*

Vanrumste, B., *see* Mertes, G., *JBHI May 2020 1509-1518*

Varadharajan, V., *see* Wu, Y., *JBHI Aug. 2020 2144-2145*

Varro, A., *see* Sampedro-Puente, D.A., *JBHI March 2020 693-704*

Vaze, S., Xie, W., and Namburete, A.I.L., Low-Memory CNNs Enabling Real-Time Ultrasound Segmentation Towards Mobile Deployment; *JBHI April 2020 1059-1069*

Veasey, B.P., *see* Panayides, A.S., *JBHI July 2020 1837-1857*

Vehi, J., *see* Ramkissoon, C.M., *JBHI Jan. 2020 259-267*

Vehkaoja, A., *see* Hoog Antink, C., *JBHI Aug. 2020 2230-2237*
Ventura, L., *see* Martina, S., *JBHI Nov. 2020 3085-3094*
Vernooij, M.W., *see* Achterberg, H.C., *JBHI March 2020 825-834*
Veronesi, F., *see* Andreassen, B.S., *JBHI April 2020 994-1003*
Viceconti, M., Juarez, M.A., Curreli, C., Pennisi, M., Russo, G., and Pappalardo, F., Credibility of *In Silico* Trial Technologies—A Theoretical Framing; *JBHI Jan. 2020 4-13*
Vilaplana, V., *see* Casamitjana, A., *JBHI Feb. 2020 365-376*
Villalobos, J.A.L., *see* Amado-Caballero, P., *JBHI Sept. 2020 2690-2700*
Virag, L., *see* Sampedro-Puente, D.A., *JBHI March 2020 693-704*
Vlachou, T., *see* Nobile, M.S., *JBHI Nov. 2020 3173-3181*
Volp, M., *see* Fernandes, M., *JBHI March 2020 907-915*
Votis, K., *see* Zacharaki, E.I., *JBHI June 2020 1557-1568*
Vu, T., *see* Jaishankar, R., *JBHI Aug. 2020 2398-2406*
Vukicevic, A.M., Milic, V., Zabotti, A., Hocevar, A., De Lucia, O., Filippou, G., Frangi, A.F., Tzioufas, A., De Vita, S., and Filipovic, N., Radiomics-Based Assessment of Primary Sjögren's Syndrome From Salivary Gland Ultrasonography Images; *JBHI March 2020 835-843*
Vullings, R., *see* Eerikainen, L.M., *JBHI June 2020 1610-1618*
Vundavilli, H., Datta, A., Sima, C., Hua, J., Lopes, R., and Bittner, M., Cryptotanshinone Induces Cell Death in Lung Cancer by Targeting Aberrant Feedback Loops; *JBHI Aug. 2020 2430-2438*

W

Wagenaar, J.B., *see* Baldassano, S.N., *JBHI Aug. 2020 2389-2397*
Waiter, G.D., *see* de Vries, C.F., *JBHI Feb. 2020 586-593*
Waldmannstetter, D., *see* Hu, X., *JBHI Sept. 2020 2599-2608*
Walkey, A.J., *see* Bashar, S.K., *JBHI Nov. 2020 3124-3135*
Wan, M., *see* Zhang, S., *JBHI April 2020 965-973*
Wang, B., *see* Hu, S., *JBHI Oct. 2020 3020-3028*
Wang, C., *see* He, J., *JBHI Sept. 2020 2473-2480*
Wang, D., Haytham, A., Pottenburgh, J., Saeedi, O., and Tao, Y., Hard Attention Net for Automatic Retinal Vessel Segmentation; *JBHI Dec. 2020 3384-3396*
Wang, F., *see* Liu, W., *JBHI Feb. 2020 503-514*
Wang, G., *see* Guo, H., *JBHI Feb. 2020 457-464*
Wang, H., Sham, P., Tong, T., and Pang, H., Pathway-Based Single-Cell RNA-Seq Classification, Clustering, and Construction of Gene-Gene Interactions Networks Using Random Forests; *JBHI June 2020 1814-1822*
Wang, H., *see* Song, L., *JBHI Oct. 2020 2912-2921*
Wang, H., *see* Guo, X., *JBHI Aug. 2020 2315-2326*
Wang, H., *see* Yue, Z., *JBHI March 2020 844-854*
Wang, H., *see* Liu, W., *JBHI Feb. 2020 503-514*
Wang, H., Jia, H., Lu, L., and Xia, Y., Thorax-Net: An Attention Regularized Deep Neural Network for Classification of Thoracic Diseases on Chest Radiography; *JBHI Feb. 2020 475-485*
Wang, H.E., *see* Jaureguibeitia, X., *JBHI Sept. 2020 2580-2588*
Wang, J., *see* Wu, M., *JBHI June 2020 1823-1834*
Wang, J., *see* Zhou, Z., *JBHI Jan. 2020 194-204*
Wang, J., *see* Sun, L., *JBHI Aug. 2020 2303-2314*
Wang, J., *see* Lu, C., *JBHI Aug. 2020 2420-2429*
Wang, J., *see* Liu, L., *JBHI Nov. 2020 3215-3225*
Wang, J., *see* Tsai, K., *JBHI Nov. 2020 3203-3214*
Wang, J., Bai, Y., and Xia, B., Simultaneous Diagnosis of Severity and Features of Diabetic Retinopathy in Fundus Photography Using Deep Learning; *JBHI Dec. 2020 3397-3407*
Wang, J., *see* Jiang, H., *JBHI Dec. 2020 3630-3641*
Wang, L., *see* Sun, Y., *JBHI Nov. 2020 3236-3247*
Wang, M., *see* Huang, J., *JBHI Sept. 2020 2609-2620*
Wang, M., *see* Zhang, Y., *JBHI Jan. 2020 171-179*
Wang, M., *see* Li, C., *JBHI Dec. 2020 3585-3594*
Wang, M., *see* Meng, L., *JBHI Dec. 2020 3576-3584*
Wang, M.D., *see* Amini, A., *JBHI Oct. 2020 2731-2732*
Wang, N., *see* Huang, J., *JBHI Jan. 2020 292-299*
Wang, Q., *see* Qiao, R., *JBHI Aug. 2020 2157-2168*
Wang, R., Fan, J., and Li, Y., Deep Multi-Scale Fusion Neural Network for Multi-Class Arrhythmia Detection; *JBHI Sept. 2020 2461-2472*
Wang, S., *see* Fan, M., *JBHI June 2020 1632-1642*
Wang, T., *see* Li, H., *JBHI April 2020 974-983*
Wang, T., *see* Dong, J., *JBHI April 2020 931-942*
Wang, T., Tian, Y., and Qiu, R.G., Long Short-Term Memory Recurrent Neural Networks for Multiple Diseases Risk Prediction by Leveraging Longitudinal Medical Records; *JBHI Aug. 2020 2337-2346*
Wang, W., *see* Huang, Q., *JBHI Oct. 2020 2860-2869*
Wang, W., *see* Tsai, K., *JBHI Nov. 2020 3203-3214*
Wang, X., *see* Wu, Q., *JBHI June 2020 1772-1779*
Wang, X., *see* Liao, W., *JBHI April 2020 984-993*
Wang, X., *see* Ranchal, R., *JBHI Nov. 2020 3182-3188*
Wang, X., Tang, F., Chen, H., Luo, L., Tang, Z., Ran, A., Cheung, C.Y., and Heng, P., UD-MIL: Uncertainty-Driven Deep Multiple Instance Learning for OCT Image Classification; *JBHI Dec. 2020 3431-3442*
Wang, Y., *see* Zhou, Z., *JBHI April 2020 943-956*
Wang, Y., *see* Zhang, Y., *JBHI Sept. 2020 2621-2629*
Wang, Y., *see* Bi, X., *JBHI Oct. 2020 2973-2983*
Wang, Y., *see* Jelodar, H., *JBHI Oct. 2020 2733-2742*
Wang, Y., *see* Liu, L., *JBHI Nov. 2020 3215-3225*
Wang, Y., *see* Kassani, P.H., *JBHI Feb. 2020 336-344*
Wang, Y., *see* Xue, X., *JBHI Feb. 2020 377-386*
Wang, Y.C., *see* Besler, E., *JBHI Aug. 2020 2359-2367*
Wang, Z., *see* He, T., *JBHI June 2020 1762-1771*
Wang, Z., *see* Hu, K., *JBHI April 2020 1215-1225*
Wang, Z., *see* Qu, W., *JBHI Oct. 2020 2833-2843*
Wang, Z., Liu, Q., and Dou, Q., Contrastive Cross-Site Learning With Redesigned Net for COVID-19 CT Classification; *JBHI Oct. 2020 2806-2813*
Wang, Z., *see* He, W., *JBHI March 2020 636-648*
Wang, Z., *see* Yang, X., *JBHI March 2020 855-865*
Wang, Z., *see* Xue, B., *JBHI Feb. 2020 614-625*
Wang, Z.J., *see* Song, L., *JBHI Oct. 2020 2912-2921*
Watkinson, P.J., *see* Shamout, F.E., *JBHI Feb. 2020 437-446*
Weber, P., *see* de Figueiredo, R.P., *JBHI Sept. 2020 2718-2725*
Wei, D., *see* Li, Y., *JBHI Oct. 2020 2787-2797*
Wei, X., *see* Cai, S., *JBHI Sept. 2020 2630-2638*
Wei, Y., *see* Sun, L., *JBHI Oct. 2020 2798-2805*
Wen, B., *see* Miao, F., *JBHI Jan. 2020 79-91*
Wen, H., *see* Dong, J., *JBHI April 2020 931-942*
Wen, X., Huang, Y., Wu, X., and Zhang, B., A Feasible Feature Extraction Method for Atrial Fibrillation Detection From BCG; *JBHI April 2020 1093-1103*
Whaiduzzaman, M., Hossain, M.R., Shovon, A.R., Roy, S., Laszka, A., Buyya, R., and Barros, A., A Privacy-Preserving Mobile and Fog Computing Framework to Trace and Prevent COVID-19 Community Transmission; *JBHI Dec. 2020 3564-3575*
White, R.D., *see* Dikici, E., *JBHI Oct. 2020 2883-2893*
Wieselthaler, G., *see* Semiz, B., *JBHI July 2020 1899-1906*
Wille, M.M.W., *see* Orting, S.N., *JBHI April 2020 1149-1159*
Wittbrodt, M.T., *see* Gurel, N.Z., *JBHI July 2020 1917-1925*
Witteveen, J., Pradhapan, P., and Mihajlovic, V., Comparison of a Pragmatic and Regression Approach for Wearable EEG Signal Quality Assessment; *JBHI March 2020 735-746*
Wollstein, G., *see* George, Y., *JBHI Dec. 2020 3421-3430*
Wong, A., *see* Shojaei, E., *JBHI Sept. 2020 2490-2498*
Wong, K., *see* Yan, S., *JBHI Jan. 2020 311-318*
Wu, D., *see* Sun, L., *JBHI Oct. 2020 2798-2805*
Wu, D., Gong, K., Arru, C.D., Homayounieh, F., Bizzo, B., Buch, V., Ren, H., Kim, K., Neumark, N., Xu, P., Liu, Z., Fang, W., Xie, N., Tak, W.Y., Park, S.Y., Lee, Y.R., Kang, M.K., Park, J.G., Carriero, A., Saba, L., Masjedi, M., Talari, H., Babaei, R., Mobin, H.K., Ebrahimian, S., Dayan, I., Kalra, M.K., and Li, Q., Severity and Consolidation Quantification of COVID-19 From CT Images Using Deep Learning Based on Hybrid Weak Labels; *JBHI Dec. 2020 3529-3538*
Wu, D.O., *see* Liu, X., *JBHI Aug. 2020 2177-2188*
Wu, F., *see* Lu, C., *JBHI Aug. 2020 2420-2429*
Wu, F., *see* Liu, L., *JBHI Nov. 2020 3215-3225*
Wu, H., *see* Yao, J., *JBHI June 2020 1550-1556*

Wu, H., *see* Bi, X., *JBHI Oct. 2020 2973-2983*
Wu, H., Lu, M., and Zeng, Y., State Estimation of Hemodynamic Model for fMRI Under Confounds: SSM Method; *JBHI March 2020 804-814*
Wu, J., *see* Li, Y., *JBHI Oct. 2020 2787-2797*
Wu, K., *see* Qin, P., *JBHI April 2020 1028-1036*
Wu, M., Gao, Y., Liu, J., Zheng, C., and Wang, J., Integrative Hypergraph Regularization Principal Component Analysis for Sample Clustering and Co-Expression Genes Network Analysis on Multi-Omics Data; *JBHI June 2020 1823-1834*
Wu, Q., Wang, X., Liu, H., and Zeng, L., Learning Hemodynamic Effect of Transcranial Infrared Laser Stimulation Using Longitudinal Data Analysis; *JBHI June 2020 1772-1779*
Wu, S., *see* Shan, C., *JBHI April 2020 929-930*
Wu, S., *see* Zhang, S., *JBHI April 2020 965-973*
Wu, S., *see* Hao, D., *JBHI Sept. 2020 2701-2710*
Wu, T., *see* Gao, F., *JBHI Jan. 2020 39-49*
Wu, X., *see* Wen, X., *JBHI April 2020 1093-1103*
Wu, X., *see* Hasan, S., *JBHI July 2020 1952-1967*
Wu, X., Zhou, B., Lv, Z., and Zhang, C., To Explore the Potentials of Independent Component Analysis in Brain-Computer Interface of Motor Imagery; *JBHI March 2020 775-787*
Wu, X., Gao, D., Borroni, D., Madhusudhan, S., Jin, Z., and Zheng, Y., Cooperative Low-Rank Models for Removing Stripe Noise From OCTA Images; *JBHI Dec. 2020 3480-3490*
Wu, Y., *see* Zhong, L., *JBHI April 2020 1114-1124*
Wu, Y., *see* Lin, B., *JBHI April 2020 1037-1045*
Wu, Y., *see* Zhang, T., *JBHI July 2020 1940-1951*
Wu, Y., Yan, Z., Yu, F.R., Deng, R., Varadharajan, V., and Chen, W., Guest Editorial: Blockchain and Healthcare Computing; *JBHI Aug. 2020 2144-2145*
Wu, Z., *see* Hu, D., *JBHI Jan. 2020 214-225*
Wu, Z., *see* Chang, L., *JBHI Nov. 2020 3111-3123*

X

Xia, B., *see* Wang, J., *JBHI Dec. 2020 3397-3407*
Xia, L., *see* Sun, L., *JBHI Oct. 2020 2798-2805*
Xia, T., *see* Xu, Q., *JBHI Sept. 2020 2481-2489*
Xia, Y., *see* Wang, H., *JBHI Feb. 2020 475-485*
Xian, X., Das, D., Pasupathy, K.S., Boie, E.T., and Sir, M., Quantifying the Impact of Resuscitation-Team Activation in Hospital Emergency Departments; *JBHI Oct. 2020 3029-3037*
Xiang, S., *see* Tang, P., *JBHI Oct. 2020 2870-2882*
Xiao, M., *see* Teng, F., *JBHI Sept. 2020 2506-2515*
Xiao, R., *see* Pereira, T., *JBHI March 2020 649-657*
Xiao, X., *see* Zhang, R., *JBHI Oct. 2020 2902-2911*
Xie, L., *see* Cai, S., *JBHI Sept. 2020 2630-2638*
Xie, N., *see* Wu, D., *JBHI Dec. 2020 3529-3538*
Xie, W., *see* Vaze, S., *JBHI April 2020 1059-1069*
Xie, X., *see* De Oliveira, H., *JBHI Nov. 2020 3076-3084*
Xie, X., *see* Yu, K., *JBHI Feb. 2020 447-456*
Xie, Y., *see* Huang, J., *JBHI Jan. 2020 292-299*
Xiong, Z., *see* Sun, C., *JBHI June 2020 1643-1651*
Xu, A., *see* Sun, C., *JBHI June 2020 1643-1651*
Xu, B., Lu, M., Cong, J., and Nener, B.D., An Ant Colony Inspired Multi-Bernoulli Filter for Cell Tracking in Time-Lapse Microscopy Sequences; *JBHI June 2020 1703-1716*
Xu, H., *see* Li, Y., *JBHI Oct. 2020 2787-2797*
Xu, J., *see* Liu, L., *JBHI March 2020 898-906*
Xu, L., *see* Yao, Y., *JBHI Jan. 2020 69-78*
Xu, M., *see* Fan, M., *JBHI June 2020 1632-1642*
Xu, M., *see* Zhang, M., *JBHI Nov. 2020 3095-3102*
Xu, P., *see* Wu, D., *JBHI Dec. 2020 3529-3538*
Xu, Q., Zeng, Y., Tang, W., Peng, W., Xia, T., Li, Z., Teng, F., Li, W., and Guo, J., Multi-Task Joint Learning Model for Segmenting and Classifying Tongue Images Using a Deep Neural Network; *JBHI Sept. 2020 2481-2489*
Xu, R., Cong, Z., Ye, X., Hirano, Y., Kido, S., Gyobu, T., Kawata, Y., Honda, O., and Tomiyama, N., Pulmonary Textures Classification via a Multi-Scale Attention Network; *JBHI July 2020 2041-2052*
Xu, S.S., Mak, M., and Cheung, C., I-Vector-Based Patient Adaptation of Deep Neural Networks for Automatic Heartbeat Classification; *JBHI March 2020 717-727*
Xu, T., *see* Sun, H., *JBHI June 2020 1664-1676*
Xu, T., *see* Zhang, S., *JBHI April 2020 965-973*
Xu, X., *see* He, T., *JBHI June 2020 1762-1771*
Xu, X., *see* Cao, H., *JBHI July 2020 2006-2015*
Xu, X., Zhang, L., Li, J., Guan, Y., and Zhang, L., A Hybrid Global-Local Representation CNN Model for Automatic Cataract Grading; *JBHI Feb. 2020 556-567*
Xu, Y., *see* Gao, F., *JBHI Jan. 2020 39-49*
Xu, Y., *see* Zhao, S., *JBHI May 2020 1394-1404*
Xu, Z., *see* Yao, J., *JBHI June 2020 1550-1556*
Xue, B., Deng, B., Hong, H., Wang, Z., Zhu, X., and Feng, D.D., Non-Contact Sleep Stage Detection Using Canonical Correlation Analysis of Respiratory Sound; *JBHI Feb. 2020 614-625*
Xue, X., *see* Qian, X., *JBHI Dec. 2020 3539-3550*
Xue, X., Wang, Y., Li, J., Jiao, Z., Ren, Z., and Gao, X., Progressive Sub-Band Residual-Learning Network for MR Image Super Resolution; *JBHI Feb. 2020 377-386*

Y

Yamamoto, Y., *see* Dong, F., *JBHI July 2020 2082-2092*
Yan, B., *see* Liu, J., *JBHI Feb. 2020 533-542*
Yan, F., *see* Sun, L., *JBHI Oct. 2020 2798-2805*
Yan, P., *see* Guo, H., *JBHI Feb. 2020 457-464*
Yan, S., and Wong, K., GESgnExt: Gene Expression Signature Extraction and Meta-Analysis on Gene Expression Omnibus; *JBHI Jan. 2020 311-318*
Yan, X., *see* Tang, P., *JBHI Oct. 2020 2870-2882*
Yan, X., *see* Qiao, R., *JBHI Aug. 2020 2157-2168*
Yan, Y., *see* Ren, J., *JBHI Dec. 2020 3551-3563*
Yan, Z., *see* Ren, Y., *JBHI Sept. 2020 2516-2522*
Yan, Z., *see* Wu, Y., *JBHI Aug. 2020 2144-2145*
Yang, D., *see* Zhu, H., *JBHI June 2020 1652-1663*
Yang, F., Poostchi, M., Yu, H., Zhou, Z., Silamut, K., Yu, J., Maude, R.J., Jaeger, S., and Antani, S., Deep Learning for Smartphone-Based Malaria Parasite Detection in Thick Blood Smears; *JBHI May 2020 1427-1438*
Yang, G., *see* Zhou, H., *JBHI June 2020 1541-1549*
Yang, G., Pang, Z., Jamal Deen, M., Dong, M., Zhang, Y., Lovell, N., and Rahmani, A.M., Homecare Robotic Systems for Healthcare 4.0: Visions and Enabling Technologies; *JBHI Sept. 2020 2535-2549*
Yang, G., Pang, Z., Rahmani, A.M., Dong, M., Zhang, Y., Deen, M.J., and Lovell, N., Guest Editorial Enabling Technologies in Health Engineering and Informatics for the New Revolution of Healthcare 4.0; *JBHI Sept. 2020 2442-2443*
Yang, G., *see* Chen, C., *JBHI Aug. 2020 2208-2215*
Yang, H., *see* Zhou, H., *JBHI June 2020 1541-1549*
Yang, H., *see* Chen, R., *JBHI June 2020 1619-1631*
Yang, H., and Bath, P.A., The Use of Data Mining Methods for the Prediction of Dementia: Evidence From the English Longitudinal Study of Aging; *JBHI Feb. 2020 345-353*
Yang, J., Feng, X., Laine, A.F., and Angelini, E.D., Characterizing Alzheimer's Disease With Image and Genetic Biomarkers Using Supervised Topic Models; *JBHI April 2020 1180-1187*
Yang, J., *see* Zhang, H., *JBHI Dec. 2020 3408-3420*
Yang, M., *see* Yang, W., *JBHI Aug. 2020 2278-2291*
Yang, M., *see* Lu, C., *JBHI Aug. 2020 2420-2429*
Yang, M., *see* Jiang, H., *JBHI Dec. 2020 3630-3641*
Yang, P., *see* Zhang, Y., *JBHI Feb. 2020 465-474*
Yang, R., *see* Liao, W., *JBHI April 2020 984-993*
Yang, S., *see* Lin, G., *JBHI July 2020 1907-1916*
Yang, S., *see* Chang, L., *JBHI Nov. 2020 3111-3123*
Yang, W., *see* Zhong, L., *JBHI April 2020 1114-1124*

Yang, W., Shi, Y., Park, S.H., Yang, M., Gao, Y., and Shen, D., An Effective MR-Guided CT Network Training for Segmenting Prostate in CT Images; *JBHI Aug. 2020 2278-2291*
Yang, X., *see* Li, H., *JBHI April 2020 974-983*
Yang, X., Lin, Y., Wang, Z., Li, X., and Cheng, K., Bi-Modality Medical Image Synthesis Using Semi-Supervised Sequential Generative Adversarial Networks; *JBHI March 2020 855-865*
Yao, D.D., *see* Ma, F., *JBHI Sept. 2020 2651-2662*
Yao, J., Chen, H., Xu, Z., Huang, J., Li, J., Jia, J., and Wu, H., Development of a Wearable Electrical Impedance Tomographic Sensor for Gesture Recognition With Machine Learning; *JBHI June 2020 1550-1556*
Yao, L., *see* Zhang, D., *JBHI Sept. 2020 2570-2579*
Yao, L., *see* Zhang, X., *JBHI Oct. 2020 2852-2859*
Yao, T., *see* Hu, K., *JBHI April 2020 1215-1225*
Yao, Y., Ghasemi, Z., Shandhi, M.M.H., Ashouri, H., Xu, L., Mukkamala, R., Inan, O.T., and Hahn, J., Mitigation of Instrument-Dependent Variability in Ballistocardiogram Morphology: Case Study on Force Plate and Customized Weighing Scale; *JBHI Jan. 2020 69-78*
Yaqoob, T., Abbas, H., and Shafqat, N., Integrated Security, Safety, and Privacy Risk Assessment Framework for Medical Devices; *JBHI June 2020 1752-1761*
Yarrot, L.B., *see* Meinich-Bache, O., *JBHI March 2020 796-803*
Yazdinejad, A., Srivastava, G., Parizi, R.M., Dehghantanha, A., Choo, K.R., and Aledhari, M., Decentralized Authentication of Distributed Patients in Hospital Networks Using Blockchain; *JBHI Aug. 2020 2146-2156*
Ye, F., *see* Teng, J., *JBHI Feb. 2020 354-364*
Ye, L., *see* Ma, F., *JBHI Sept. 2020 2651-2662*
Ye, X., *see* Xu, R., *JBHI July 2020 2041-2052*
Ye, Y., Hou, S., Fan, Y., Zhang, Y., Qian, Y., Sun, S., Peng, Q., Ju, M., Song, W., and Loparo, K., α-Satellite: An AI-Driven System and Benchmark Datasets for Dynamic COVID-19 Risk Assessment in the United States; *JBHI Oct. 2020 2755-2764*
Ye, Y., *see* He, W., *JBHI March 2020 636-648*
Yeh, S., *see* Liu, L., *JBHI March 2020 898-906*
Yi, Z., *see* He, T., *JBHI June 2020 1762-1771*
Yin, X., *see* Zhuang, Y., *JBHI Aug. 2020 2260-2267*
Ying, J., Dutta, J., Guo, N., Hu, C., Zhou, D., Sitek, A., and Li, Q., Classification of Exacerbation Frequency in the COPDGene Cohort Using Deep Learning With Deep Belief Networks; *JBHI June 2020 1805-1813*
Yong, K.X.X., *see* Mengoudi, K., *JBHI Nov. 2020 3066-3075*
Yoo, S.K., *see* Lee, J., *JBHI May 2020 1265-1275*
Yoon, H., *see* Gao, F., *JBHI Jan. 2020 39-49*
Yoon, H., *see* Choi, S.H., *JBHI Dec. 2020 3606-3615*
Yoon, J., Drumright, L.N., and van der Schaar, M., Anonymization Through Data Synthesis Using Generative Adversarial Networks (ADS-GAN); *JBHI Aug. 2020 2378-2388*
Yoon, J., *see* Jarrett, D., *JBHI Feb. 2020 424-436*
Yorozu, A., *see* Eguchi, R., *JBHI May 2020 1276-1283*
Yoshizawa, M., *see* Sugita, N., *JBHI June 2020 1788-1795*
Young, A., *see* Panayides, A.S., *JBHI July 2020 1837-1857*
Yu, F.R., *see* Wu, Y., *JBHI Aug. 2020 2144-2145*
Yu, H., *see* Chen, B., *JBHI Aug. 2020 2292-2302*
Yu, H., *see* Yang, F., *JBHI May 2020 1427-1438*
Yu, J., *see* Huang, Q., *JBHI Oct. 2020 2860-2869*
Yu, J., *see* Yang, F., *JBHI May 2020 1427-1438*
Yu, K., and Xie, X., Predicting Hospital Readmission: A Joint Ensemble-Learning Model; *JBHI Feb. 2020 447-456*
Yu, L., *see* Ma, F., *JBHI Sept. 2020 2651-2662*
Yu, N., *see* Jiao, C., *JBHI Oct. 2020 3002-3011*
Yu, R., Zheng, Y., Zhang, R., Jiang, Y., and Poon, C.C.Y., Using a Multi-Task Recurrent Neural Network With Attention Mechanisms to Predict Hospital Mortality of Patients; *JBHI Feb. 2020 486-492*
Yu, Y., Chen, X., Cao, S., Zhang, X., and Chen, X., Exploration of Chinese Sign Language Recognition Using Wearable Sensors Based on Deep Belief Net; *JBHI May 2020 1310-1320*
Yuan, F., *see* Huang, Q., *JBHI Oct. 2020 2860-2869*
Yuan, H., *see* Sun, L., *JBHI Oct. 2020 2798-2805*
Yuan, S., *see* Okuwobi, I.P., *JBHI April 2020 1125-1136*
Yuan, S., *see* Cui, Z., *JBHI May 2020 1519-1527*
Yuan, W., *see* Fan, M., *JBHI June 2020 1632-1642*
Yuan, Z., *see* Peng, J., *JBHI Aug. 2020 2251-2259*
Yue, Z., Ding, S., Zhao, W., Wang, H., Ma, J., Zhang, Y., and Zhang, Y., Automatic CIN Grades Prediction of Sequential Cervigram Image Using LSTM With Multistate CNN Features; *JBHI March 2020 844-854*

Z

Zabalza, J., *see* Ren, J., *JBHI Dec. 2020 3551-3563*
Zabihi, M., Kiranyaz, S., Jantti, V., Lipping, T., and Gabbouj, M., Patient-Specific Seizure Detection Using Nonlinear Dynamics and Nullclines; *JBHI Feb. 2020 543-555*
Zabotti, A., *see* Vukicevic, A.M., *JBHI March 2020 835-843*
Zabulis, X., *see* Hernandez-Matas, C., *JBHI Dec. 2020 3362-3373*
Zacharaki, E.I., Deltouzos, K., Kalogiannis, S., Kalamaras, I., Bianconi, L., Degano, C., Orselli, R., Montesa, J., Moustakas, K., Votis, K., Tzovaras, D., and Megalooikonomou, V., FrailSafe: An ICT Platform for Unobtrusive Sensing of Multi-Domain Frailty for Personalized Interventions; *JBHI June 2020 1557-1568*
Zaitcev, A., Eissa, M.R., Hui, Z., Good, T., Elliott, J., and Benaissa, M., A Deep Neural Network Application for Improved Prediction of HbA_{1c} in Type 1 Diabetes; *JBHI Oct. 2020 2932-2941*
Zapp, D., *see* Sarhan, M.H., *JBHI Dec. 2020 3338-3350*
Zeng, J., *see* Qin, P., *JBHI April 2020 1028-1036*
Zeng, L., *see* Wu, Q., *JBHI June 2020 1772-1779*
Zeng, X., *see* Sun, H., *JBHI June 2020 1664-1676*
Zeng, Y., *see* Xu, Q., *JBHI Sept. 2020 2481-2489*
Zeng, Y., *see* Wu, H., *JBHI March 2020 804-814*
Zervakis, M., *see* Panayides, A.S., *JBHI July 2020 1837-1857*
Zha, Y., *see* Li, C., *JBHI Dec. 2020 3585-3594*
Zha, Y., *see* Meng, L., *JBHI Dec. 2020 3576-3584*
Zhang, A., *see* Liu, J., *JBHI July 2020 2028-2040*
Zhang, B., *see* Wen, X., *JBHI April 2020 1093-1103*
Zhang, B., *see* Huang, Q., *JBHI Jan. 2020 160-170*
Zhang, C., *see* Wu, X., *JBHI March 2020 775-787*
Zhang, D., Chen, K., Jian, D., and Yao, L., Motor Imagery Classification via Temporal Attention Cues of Graph Embedded EEG Signals; *JBHI Sept. 2020 2570-2579*
Zhang, D., *see* Huang, J., *JBHI Sept. 2020 2609-2620*
Zhang, D., *see* Tang, P., *JBHI Oct. 2020 2870-2882*
Zhang, D., *see* Sun, L., *JBHI Oct. 2020 2798-2805*
Zhang, D., *see* Chen, B., *JBHI July 2020 2016-2027*
Zhang, D., *see* Chen, B., *JBHI Aug. 2020 2292-2302*
Zhang, D., *see* Chen, F., *JBHI Dec. 2020 3616-3629*
Zhang, H., Yang, J., Zhou, K., Li, F., Hu, Y., Zhao, Y., Zheng, C., Zhang, X., and Liu, J., Automatic Segmentation and Visualization of Choroid in OCT with Knowledge Infused Deep Learning; *JBHI Dec. 2020 3408-3420*
Zhang, J., *see* Gao, Y., *JBHI June 2020 1677-1685*
Zhang, J., *see* Sarabi, M.S., *JBHI Dec. 2020 3466-3479*
Zhang, J., *see* Pan, C., *JBHI Feb. 2020 626-633*
Zhang, K., *see* Ren, Y., *JBHI Sept. 2020 2516-2522*
Zhang, K., *see* Chen, C., *JBHI Aug. 2020 2208-2215*
Zhang, L., *see* Li, W., *JBHI April 2020 1160-1168*
Zhang, L., *see* Hao, D., *JBHI Sept. 2020 2701-2710*
Zhang, L., *see* Xu, X., *JBHI Feb. 2020 556-567*
Zhang, L., *see* Xu, X., *JBHI Feb. 2020 556-567*
Zhang, M., Li, X., Xu, M., and Li, Q., Automated Semantic Segmentation of Red Blood Cells for Sickle Cell Disease; *JBHI Nov. 2020 3095-3102*
Zhang, R., Xiao, X., Liu, Z., Li, Y., and Li, S., MRLN: Multi-Task Relational Learning Network for MRI Vertebral Localization, Identification, and Segmentation; *JBHI Oct. 2020 2902-2911*
Zhang, R., *see* Chen, D., *JBHI May 2020 1469-1476*
Zhang, R., *see* Yu, R., *JBHI Feb. 2020 486-492*
Zhang, S., Wu, S., Shang, S., Qin, X., Jia, X., Li, D., Cui, Z., Xu, T., Niu, G., Bouakaz, A., and Wan, M., Detection and Monitoring of Thermal Lesions

Induced by Microwave Ablation Using Ultrasound Imaging and Convolutional Neural Networks; *JBHI April 2020 965-973*
Zhang, T., *see* He, J., *JBHI Sept. 2020 2473-2480*
Zhang, T., *see* Zhang, X., *JBHI Sept. 2020 2663-2670*
Zhang, T., Shao, Y., Wu, Y., Pang, Z., and Liu, G., Multiple Vowels Repair Based on Pitch Extraction and Line Spectrum Pair Feature for Voice Disorder; *JBHI July 2020 1940-1951*
Zhang, W., *see* Niu, J., *JBHI May 2020 1321-1332*
Zhang, X., *see* Lai, D., *JBHI June 2020 1569-1578*
Zhang, X., *see* Zhong, L., *JBHI April 2020 1114-1124*
Zhang, X., Geng, P., Zhang, T., Lu, Q., Gao, P., and Mei, J., Aceso: PICO-Guided Evidence Summarization on Medical Literature; *JBHI Sept. 2020 2663-2670*
Zhang, X., Yao, L., Dong, M., Liu, Z., Zhang, Y., and Li, Y., Adversarial Representation Learning for Robust Patient-Independent Epileptic Seizure Detection; *JBHI Oct. 2020 2852-2859*
Zhang, X., *see* Lu, Y., *JBHI Jan. 2020 205-213*
Zhang, X., *see* Yu, Y., *JBHI May 2020 1310-1320*
Zhang, X., *see* Zhang, Y., *JBHI May 2020 1528-1536*
Zhang, X., *see* Zhang, H., *JBHI Dec. 2020 3408-3420*
Zhang, X., *see* Chen, F., *JBHI Dec. 2020 3616-3629*
Zhang, Y., *see* Guo, J., *JBHI June 2020 1539-1540*
Zhang, Y., *see* Gao, Y., *JBHI June 2020 1677-1685*
Zhang, Y., *see* Yang, G., *JBHI Sept. 2020 2535-2549*
Zhang, Y., *see* Yang, G., *JBHI Sept. 2020 2442-2443*
Zhang, Y., Peng, P., Ju, Y., Li, G., Calhoun, V.D., and Wang, Y., Canonical Correlation Analysis of Imaging Genetics Data Based on Statistical Independence and Structural Sparsity; *JBHI Sept. 2020 2621-2629*
Zhang, Y., *see* Zhang, X., *JBHI Oct. 2020 2852-2859*
Zhang, Y., *see* Ye, Y., *JBHI Oct. 2020 2755-2764*
Zhang, Y., Li, A., He, J., and Wang, M., A Novel MKL Method for GBM Prognosis Prediction by Integrating Histopathological Image and Multi-Omics Data; *JBHI Jan. 2020 171-179*
Zhang, Y., *see* Peng, L., *JBHI Aug. 2020 2327-2336*
Zhang, Y., *see* Movahedi, F., *JBHI Aug. 2020 2347-2358*
Zhang, Y., *see* Yue, Z., *JBHI March 2020 844-854*
Zhang, Y., *see* Yue, Z., *JBHI March 2020 844-854*
Zhang, Y., *see* Ahmed, M.R., *JBHI Nov. 2020 3044-3054*
Zhang, Y., *see* Bonato, P., *JBHI Nov. 2020 3189-3190*
Zhang, Y., Zhang, X., Lane, A.N., Fan, T.W., and Liu, J., Inferring Gene Regulatory Networks of Metabolic Enzymes Using Gradient Boosted Trees; *JBHI May 2020 1528-1536*
Zhang, Y., Guo, Y., Yang, P., Chen, W., and Lo, B., Epilepsy Seizure Prediction on EEG Using Common Spatial Pattern and Convolutional Neural Network; *JBHI Feb. 2020 465-474*
Zhang, Y., *see* Liu, J., *JBHI Feb. 2020 533-542*
Zhang, Z., *see* Huang, J., *JBHI Sept. 2020 2609-2620*
Zhang, Z., Han, J., Qian, K., Janott, C., Guo, Y., and Schuller, B., Snore-GANs: Improving Automatic Snore Sound Classification With Synthesized Data; *JBHI Jan. 2020 300-310*
Zhao, B., *see* He, Y., *JBHI Feb. 2020 493-502*
Zhao, F., *see* Sun, C., *JBHI June 2020 1643-1651*
Zhao, H., *see* Zhu, H., *JBHI June 2020 1652-1663*
Zhao, H., *see* Ren, J., *JBHI Dec. 2020 3551-3563*
Zhao, L., and Feng, D., Deep Neural Networks for Survival Analysis Using Pseudo Values; *JBHI Nov. 2020 3308-3314*
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Automatic Lung Nodule Detection Combined With Gaze Information Improves Radiologists' Screening Performance. *Aresta, G.*, +, *JBHI Oct. 2020 2894-2901*

Bayesian Inference of Lymph Node Ratio Estimation and Survival Prognosis for Breast Cancer Patients. *Teng, J.*, +, *JBHI Feb. 2020 354-364*

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Coarse-to-Fine Adversarial Networks and Zone-Based Uncertainty Analysis for NK/T-Cell Lymphoma Segmentation in CT/PET Images. *Hu, X.*, +, *JBHI Sept. 2020 2599-2608*

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Deep Learning-Based Gleason Grading of Prostate Cancer From Histopathology Images—Role of Multiscale Decision Aggregation and Data Augmentation. *Karimi, D.*, +, *JBHI May 2020 1413-1426*

Detection and Monitoring of Thermal Lesions Induced by Microwave Ablation Using Ultrasound Imaging and Convolutional Neural Networks. *Zhang, S.*, +, *JBHI April 2020 965-973*

Diagnosis of Benign and Malignant Thyroid Nodules Using Combined Conventional Ultrasound and Ultrasound Elasticity Imaging. *Qin, P.*, +, *JBHI April 2020 1028-1036*

Differential Diagnosis of Atypical Hepatocellular Carcinoma in Contrast-Enhanced Ultrasound Using Spatio-Temporal Diagnostic Semantics. *Huang, Q.*, +, *JBHI Oct. 2020 2860-2869*

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GP-CNN-DTEL: Global-Part CNN Model With Data-Transformed Ensemble Learning for Skin Lesion Classification. *Tang, P.*, +, *JBHI Oct. 2020 2870-2882*

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Adaptive Feature Selection Guided Deep Forest for COVID-19 Classification With Chest CT. *Sun, L.*, +, *JBHI Oct. 2020 2798-2805*

An Effective MR-Guided CT Network Training for Segmenting Prostate in CT Images. *Yang, W.*, +, *JBHI Aug. 2020 2278-2291*

Automatic Lung Nodule Detection Combined With Gaze Information Improves Radiologists' Screening Performance. *Aresta, G.*, +, *JBHI Oct. 2020 2894-2901*

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Lesion Location Attention Guided Network for Multi-Label Thoracic Disease Classification in Chest X-Rays. *Chen, B.*, +, *JBHI July 2020 2016-2027*

MR-Forest: A Deep Decision Framework for False Positive Reduction in Pulmonary Nodule Detection. *Zhu, H.*, +, *JBHI June 2020 1652-1663*

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A Multi-Domain Connectome Convolutional Neural Network for Identifying Schizophrenia From EEG Connectivity Patterns. *Phang, C.*, +, *JBHI May 2020 1333-1343*

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IRIS: A Modular Platform for Continuous Monitoring and Caretaker Notification in the Intensive Care Unit. *Baldassano, S.N.*, +, *JBHI Aug. 2020 2389-2397*
Long Short-Term Memory Networks for Unconstrained Sleep Stage Classification Using Polyvinylidene Fluoride Film Sensor. *Choi, S.H.*, +, *JBHI Dec. 2020 3606-3615*
Motor Imagery Classification via Temporal Attention Cues of Graph Embedded EEG Signals. *Zhang, D.*, +, *JBHI Sept. 2020 2570-2579*
Patient-Specific Seizure Detection Using Nonlinear Dynamics and Nullclines. *Zabihi, M.*, +, *JBHI Feb. 2020 543-555*
Pattern-Reversal Visual Evoked Potential on Smart Glasses. *Terracciano, R.*, +, *JBHI Jan. 2020 226-234*
Prediction of Reaction Time and Vigilance Variability From Spatio-Spectral Features of Resting-State EEG in a Long Sustained Attention Task. *Torkamani-Azar, M.*, +, *JBHI Sept. 2020 2550-2558*
QuPWM: Feature Extraction Method for Epileptic Spike Classification. *Chahid, A.*, +, *JBHI Oct. 2020 2814-2824*
To Explore the Potentials of Independent Component Analysis in Brain-Computer Interface of Motor Imagery. *Wu, X.*, +, *JBHI March 2020 775-787*

Electromyography

A Hierarchical Neural Network for Sleep Stage Classification Based on Comprehensive Feature Learning and Multi-Flow Sequence Learning. *Sun, C.*, +, *JBHI May 2020 1351-1366*
Exploration of Chinese Sign Language Recognition Using Wearable Sensors Based on Deep Belief Net. *Yu, Y.*, +, *JBHI May 2020 1310-1320*
Finger Joint Angle Estimation Based on Motoneuron Discharge Activities. *Dai, C.*, +, *JBHI March 2020 760-767*
Heterogeneous Recurrence Analysis of Disease-Altered Spatiotemporal Patterns in Multi-Channel Cardiac Signals. *Chen, R.*, +, *JBHI June 2020 1619-1631*

Electronic health records

A Patient-Centric Health Information Exchange Framework Using Blockchain Technology. *Zhuang, Y.*, +, *JBHI Aug. 2020 2169-2176*
Anonymization Through Data Synthesis Using Generative Adversarial Networks (ADS-GAN). *Yoon, J.*, +, *JBHI Aug. 2020 2378-2388*
Discovering the Type 2 Diabetes in Electronic Health Records Using the Sparse Balanced Support Vector Machine. *Bernardini, M.*, +, *JBHI Jan. 2020 235-246*
Disrupting Healthcare Silos: Addressing Data Volume, Velocity and Variety With a Cloud-Native Healthcare Data Ingestion Service. *Ranchal, R.*, +, *JBHI Nov. 2020 3182-3188*
EMR-Based Phenotyping of Ischemic Stroke Using Supervised Machine Learning and Text Mining Techniques. *Sung, S.*, +, *JBHI Oct. 2020 2922-2931*
Natural Language Generation Model for Mammography Reports Simulation. *Hoogi, A.*, +, *JBHI Sept. 2020 2711-2717*
Natural Language Processing for Mimicking Clinical Trial Recruitment in Critical Care: A Semi-Automated Simulation Based on the LeoPARDS Trial. *Tissot, H.C.*, +, *JBHI Oct. 2020 2950-2959*
On Clinical Event Prediction in Patient Treatment Trajectory Using Longitudinal Electronic Health Records. *Duan, H.*, +, *JBHI July 2020 2053-2063*
TAPER: Time-Aware Patient EHR Representation. *Darabi, S.*, +, *JBHI Nov. 2020 3268-3275*
Using a Multi-Task Recurrent Neural Network With Attention Mechanisms to Predict Hospital Mortality of Patients. *Yu, R.*, +, *JBHI Feb. 2020 486-492*

Emotion recognition

Constructing a Personalized Cross-Day EEG-Based Emotion-Classification Model Using Transfer Learning. *Lin, Y., JBHI May 2020 1255-1264*
Deep Learning Classification of Neuro-Emotional Phase Domain Complexity Levels Induced by Affective Video Film Clips. *Aydin, S., JBHI June 2020 1695-1702*

Encoding

Leveraging Semantics in WordNet to Facilitate the Computer-Assisted Coding of ICD-11. *Chen, D.*, +, *JBHI May 2020 1469-1476*

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IoT-Enabled Dual-Arm Motion Capture and Mapping for Telerobotics in Home Care. *Zhou, H.*, +, *JBHI June 2020 1541-1549*

Entropy

Atrial Fibrillation Detection During Sepsis: Study on MIMIC III ICU Data. *Bashar, S.K.*, +, *JBHI Nov. 2020 3124-3135*
Classifying Depression Severity in Recovery From Major Depressive Disorder via Dynamic Facial Features. *Harati, S.*, +, *JBHI March 2020 815-824*
Inaccurate Labels in Weakly-Supervised Deep Learning: Automatic Identification and Correction and Their Impact on Classification Performance. *Hao, D.*, +, *JBHI Sept. 2020 2701-2710*
Motion During Acquisition is Associated With fMRI Brain Entropy. *de Vries, C.F.*, +, *JBHI Feb. 2020 586-593*
Multi-Objective-Based Radiomic Feature Selection for Lesion Malignancy Classification. *Zhou, Z.*, +, *JBHI Jan. 2020 194-204*

Enzymes

Inferring Gene Regulatory Networks of Metabolic Enzymes Using Gradient Boosted Trees. *Zhang, Y.*, +, *JBHI May 2020 1528-1536*
Short Keynote Paper: Single Molecule Detection of Protein Biomarkers to Define the Continuum From Health to Disease. *Duffy, D.C., JBHI July 2020 1864-1868*

Epidemics

A Network-Based Stochastic Epidemic Simulator: Controlling COVID-19 With Region-Specific Policies. *Kuzdeuov, A.*, +, *JBHI Oct. 2020 2743-2754*
COVID-19 Optimizer Algorithm, Modeling and Controlling of Coronavirus Distribution Process. *Hosseini, E.*, +, *JBHI Oct. 2020 2765-2775*

Estimation

Erratum to "Non-Invasive Estimation of Hemoglobin Using a Multi-Model Stacking Regressor' to be Published in 'IEEE Journal of Biomedical and Health Informatics". *Acharya, S.*, +, *JBHI Sept. 2020 2726*
Improved 3D Catheter Shape Estimation Using Ultrasound Imaging for Endovascular Navigation: A Further Study. *Chen, F.*, +, *JBHI Dec. 2020 3616-3629*
Visual Field Estimation by Probabilistic Classification. *Chesley, B.*, +, *JBHI Dec. 2020 3499-3506*

Estimation theory
Robust Interbeat Interval and Heart Rate Variability Estimation Method From Various Morphological Features Using Wearable Sensors. *Aygun, A.*, +, *JBHI Aug. 2020 2238-2250*
Evolution (biological)
PopPhy-CNN: A Phylogenetic Tree Embedded Architecture for Convolutional Neural Networks to Predict Host Phenotype From Metagenomic Data. *Reiman, D.*, +, *JBHI Oct. 2020 2993-3001*
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A Hybrid Global-Local Representation CNN Model for Automatic Cataract Grading. *Xu, X.*, +, *JBHI Feb. 2020 556-567*
Adaptive-Guided-Coupling-Probability Level Set for Retinal Layer Segmentation. *Sun, Y.*, +, *JBHI Nov. 2020 3236-3247*
An Analysis of Eye-Tracking Features and Modelling Methods for Free-Viewed Standard Stimulus: Application for Schizophrenia Detection. *Kacur, J.*, +, *JBHI Nov. 2020 3055-3065*
Automated Quantification of Hyperreflective Foci in SD-OCT With Diabetic Retinopathy. *Okuwobi, I.P.*, +, *JBHI April 2020 1125-1136*
Clinical Interpretable Deep Learning Model for Glaucoma Diagnosis. *Liao, W.*, +, *JBHI May 2020 1405-1412*
Direct Cup-to-Disc Ratio Estimation for Glaucoma Screening via Semi-Supervised Learning. *Zhao, R.*, +, *JBHI April 2020 1104-1113*
Guest Editorial Ophthalmic Image Analysis and Informatics. *Cheng, J.*, +, *JBHI Dec. 2020 3335-3337*
Measuring Saccade Latency Using Smartphone Cameras. *Lai, H.*, +, *JBHI March 2020 885-897*
Pattern-Reversal Visual Evoked Potential on Smart Glasses. *Terracciano, R.*, +, *JBHI Jan. 2020 226-234*
Robust Fovea Localization Based on Symmetry Measure. *Guo, X.*, +, *JBHI Aug. 2020 2315-2326*
Segmenting Diabetic Retinopathy Lesions in Multispectral Images Using Low-Dimensional Spatial-Spectral Matrix Representation. *He, Y.*, +, *JBHI Feb. 2020 493-502*

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Facial Weakness Analysis and Quantification of Static Images. *Zhuang, Y.*, +, *JBHI Aug. 2020 2260-2267*
Fall detection
Smart Seismic Sensing for Indoor Fall Detection, Location, and Notification. *Clemente, J.*, +, *JBHI Feb. 2020 524-532*
Fast Fourier transforms
QuPWM: Feature Extraction Method for Epileptic Spike Classification. *Chahid, A.*, +, *JBHI Oct. 2020 2814-2824*
Fats
3D Shape-Based Body Composition Inference Model Using a Bayesian Network. *Lu, Y.*, +, *JBHI Jan. 2020 205-213*
Feature extraction
A Feasible Feature Extraction Method for Atrial Fibrillation Detection From BCG. *Wen, X.*, +, *JBHI April 2020 1093-1103*
A Generic Quality Control Framework for Fetal Ultrasound Cardiac Four-Chamber Planes. *Dong, J.*, +, *JBHI April 2020 931-942*
A Hierarchical Neural Network for Sleep Stage Classification Based on Comprehensive Feature Learning and Multi-Flow Sequence Learning. *Sun, C.*, +, *JBHI May 2020 1351-1366*
A Hybrid Global-Local Representation CNN Model for Automatic Cataract Grading. *Xu, X.*, +, *JBHI Feb. 2020 556-567*
A Markov-Switching Model Approach to Heart Sound Segmentation and Classification. *Noman, F.*, +, *JBHI March 2020 705-716*
A Multi-Domain Connectome Convolutional Neural Network for Identifying Schizophrenia From EEG Connectivity Patterns. *Phang, C.*, +, *JBHI May 2020 1333-1343*
A Unified Framework for Quality Indexing and Classification of Seismocardiogram Signals. *Zia, J.*, +, *JBHI April 2020 1080-1092*
Adaptive Feature Selection Guided Deep Forest for COVID-19 Classification With Chest CT. *Sun, L.*, +, *JBHI Oct. 2020 2798-2805*
Alzheimer's Disease Diagnosis and Severity Level Detection Based on Electroencephalography Modulation Spectral "Patch" Features. *Cassani, R.*, +, *JBHI July 2020 1982-1993*
An End-to-End Multi-Task Deep Learning Framework for Skin Lesion Analysis. *Song, L.*, +, *JBHI Oct. 2020 2912-2921*
Artificial Neural Network for in-Bed Posture Classification Using Bed-Sheet Pressure Sensors. *Matar, G.*, +, *JBHI Jan. 2020 101-110*
Augmenting Dementia Cognitive Assessment With Instruction-Less Eye-Tracking Tests. *Mengoudi, K.*, +, *JBHI Nov. 2020 3066-3075*
Automated Semantic Segmentation of Red Blood Cells for Sickle Cell Disease. *Zhang, M.*, +, *JBHI Nov. 2020 3095-3102*
Automated Surgical Term Clustering: A Text Mining Approach for Unstructured Textual Surgery Descriptions. *Khaleghi, T.*, +, *JBHI July 2020 2107-2118*
Automatic CIN Grades Prediction of Sequential Cervigram Image Using LSTM With Multistate CNN Features. *Yue, Z.*, +, *JBHI March 2020 844-854*
Automatic Identification of Breast Ultrasound Image Based on Supervised Block-Based Region Segmentation Algorithm and Features Combination Migration Deep Learning Model. *Liao, W.*, +, *JBHI April 2020 984-993*
Automatic Scale Severity Assessment Method in Psoriasis Skin Images Using Local Descriptors. *George, Y.*, +, *JBHI Feb. 2020 577-585*
Automation of the Timed-Up-and-Go Test Using a Conventional Video Camera. *Savoie, P.*, +, *JBHI April 2020 1196-1205*
Blind Monaural Source Separation on Heart and Lung Sounds Based on Periodic-Coded Deep Autoencoder. *Tsai, K.*, +, *JBHI Nov. 2020 3203-3214*
Blood Cell Classification Based on Hyperspectral Imaging With Modulated Gabor and CNN. *Huang, Q.*, +, *JBHI Jan. 2020 160-170*
Characterizing Alzheimer's Disease With Image and Genetic Biomarkers Using Supervised Topic Models. *Yang, J.*, +, *JBHI April 2020 1180-1187*
Classification of Exacerbation Frequency in the COPDGene Cohort Using Deep Learning With Deep Belief Networks. *Ying, J.*, +, *JBHI June 2020 1805-1813*
Classification of Severe and Critical Covid-19 Using Deep Learning and Radiomics. *Li, C.*, +, *JBHI Dec. 2020 3585-3594*
Classifying Depression Severity in Recovery From Major Depressive Disorder via Dynamic Facial Features. *Harati, S.*, +, *JBHI March 2020 815-824*
Clinical Interpretable Deep Learning Model for Glaucoma Diagnosis. *Liao, W.*, +, *JBHI May 2020 1405-1412*
Coherent Pattern in Multi-Layer Brain Networks: Application to Epilepsy Identification. *Huang, J.*, +, *JBHI Sept. 2020 2609-2620*
Computer-Aided Diagnosis in Histopathological Images of the Endometrium Using a Convolutional Neural Network and Attention Mechanisms. *Sun, H.*, +, *JBHI June 2020 1664-1676*
CycleGAN With an Improved Loss Function for Cell Detection Using Partly Labeled Images. *He, J.*, +, *JBHI Sept. 2020 2473-2480*
Decoding Brain States From fMRI Signals by Using Unsupervised Domain Adaptation. *Gao, Y.*, +, *JBHI June 2020 1677-1685*
Deep Learning Classification of Neuro-Emotional Phase Domain Complexity Levels Induced by Affective Video Film Clips. *Aydin, S., JBHI June 2020 1695-1702*
Deep Learning for Fall Risk Assessment With Inertial Sensors: Utilizing Domain Knowledge in Spatio-Temporal Gait Parameters. *Tunca, C.*, +, *JBHI July 2020 1994-2005*
Deep Learning on Computerized Analysis of Chronic Obstructive Pulmonary Disease. *Altan, G.*, +, *JBHI May 2020 1344-1350*
Deep Learning-Based Classification of Liver Cancer Histopathology Images Using Only Global Labels. *Sun, C.*, +, *JBHI June 2020 1643-1651*
Deep Learning-Based Gleason Grading of Prostate Cancer From Histopathology Images—Role of Multiscale Decision Aggregation and Data Augmentation. *Karimi, D.*, +, *JBHI May 2020 1413-1426*
Deep Multi-Scale Fusion Neural Network for Multi-Class Arrhythmia Detection. *Wang, R.*, +, *JBHI Sept. 2020 2461-2472*

Detecting Parkinsonian Tremor From IMU Data Collected in-the-Wild Using Deep Multiple-Instance Learning. *Papadopoulos, A.*, +, *JBHI Sept. 2020 2559-2569*

Diagnosis of Benign and Malignant Thyroid Nodules Using Combined Conventional Ultrasound and Ultrasound Elasticity Imaging. *Qin, P.*, +, *JBHI April 2020 1028-1036*

Differential Diagnosis of Atypical Hepatocellular Carcinoma in Contrast-Enhanced Ultrasound Using Spatio-Temporal Diagnostic Semantics. *Huang, Q.*, +, *JBHI Oct. 2020 2860-2869*

Efficient Activity Recognition in Smart Homes Using Delayed Fuzzy Temporal Windows on Binary Sensors. *Hamad, R.A.*, +, *JBHI Feb. 2020 387-395*

Efficient and Effective Training of COVID-19 Classification Networks With Self-Supervised Dual-Track Learning to Rank. *Li, Y.*, +, *JBHI Oct. 2020 2787-2797*

Efficient and Robust Skeleton-Based Quality Assessment and Abnormality Detection in Human Action Performance. *Elkholy, A.*, +, *JBHI Jan. 2020 280-291*

Electroencephalogram Spectral Moments for the Detection of Nocturnal Hypoglycemia. *Ngo, C.Q.*, +, *JBHI May 2020 1237-1245*

ELEMENT: Multi-Modal Retinal Vessel Segmentation Based on a Coupled Region Growing and Machine Learning Approach. *Rodrigues, E.O.*, +, *JBHI Dec. 2020 3507-3519*

Epilepsy Seizure Prediction on EEG Using Common Spatial Pattern and Convolutional Neural Network. *Zhang, Y.*, +, *JBHI Feb. 2020 465-474*

Epileptic Seizure Classification With Symmetric and Hybrid Bilinear Models. *Liu, T.*, +, *JBHI Oct. 2020 2844-2851*

Exploration of Chinese Sign Language Recognition Using Wearable Sensors Based on Deep Belief Net. *Yu, Y.*, +, *JBHI May 2020 1310-1320*

Facial Weakness Analysis and Quantification of Static Images. *Zhuang, Y.*, +, *JBHI Aug. 2020 2260-2267*

GoogLeNet-Based Ensemble FCNet Classifier for Focal Liver Lesion Diagnosis. *Balagourouchetty, L.*, +, *JBHI June 2020 1686-1694*

GP-CNN-DTEL: Global-Part CNN Model With Data-Transformed Ensemble Learning for Skin Lesion Classification. *Tang, P.*, +, *JBHI Oct. 2020 2870-2882*

Hard Attention Net for Automatic Retinal Vessel Segmentation. *Wang, D.*, +, *JBHI Dec. 2020 3384-3396*

Heart Sound Segmentation Using Bidirectional LSTMs With Attention. *Fernando, T.*, +, *JBHI June 2020 1601-1609*

Hierarchical Approach to Classify Food Scenes in Egocentric Photo-Streams. *Martinez, E.T.*, +, *JBHI March 2020 866-877*

Improving Automatic Polyp Detection Using CNN by Exploiting Temporal Dependency in Colonoscopy Video. *Qadir, H.A.*, +, *JBHI Jan. 2020 180-193*

Inter-Patient ECG Classification With Symbolic Representations and Multi-Perspective Convolutional Neural Networks. *Niu, J.*, +, *JBHI May 2020 1321-1332*

Joint Audio-Ultrasound Food Recognition for Noisy Environments. *Lee, K., JBHI May 2020 1477-1489*

Joint Prediction of Breast Cancer Histological Grade and Ki-67 Expression Level Based on DCE-MRI and DWI Radiomics. *Fan, M.*, +, *JBHI June 2020 1632-1642*

Knowledge-Based Analysis for Mortality Prediction From CT Images. *Guo, H.*, +, *JBHI Feb. 2020 457-464*

Label Co-Occurrence Learning With Graph Convolutional Networks for Multi-Label Chest X-Ray Image Classification. *Chen, B.*, +, *JBHI Aug. 2020 2292-2302*

Learning Deep Representations for Video-Based Intake Gesture Detection. *Rouast, P.V.*, +, *JBHI June 2020 1727-1737*

Lesion Location Attention Guided Network for Multi-Label Thoracic Disease Classification in Chest X-Rays. *Chen, B.*, +, *JBHI July 2020 2016-2027*

Low-Memory CNNs Enabling Real-Time Ultrasound Segmentation Towards Mobile Deployment. *Vaze, S.*, +, *JBHI April 2020 1059-1069*

Machine Listening for Heart Status Monitoring: Introducing and Benchmarking HSS—The Heart Sounds Shenzhen Corpus. *Dong, F.*, +, *JBHI July 2020 2082-2092*

MediMLP: Using Grad-CAM to Extract Crucial Variables for Lung Cancer Postoperative Complication Prediction. *He, T.*, +, *JBHI June 2020 1762-1771*

miRTMC: A miRNA Target Prediction Method Based on Matrix Completion Algorithm. *Jiang, H.*, +, *JBHI Dec. 2020 3630-3641*

Mitochondria Segmentation From EM Images via Hierarchical Structured Contextual Forest. *Peng, J.*, +, *JBHI Aug. 2020 2251-2259*

Modeling Consistent Dynamics of Cardiogenic Vibrations in Low-Dimensional Subspace. *Zia, J.*, +, *JBHI July 2020 1887-1898*

Motion Sensor-Based Assessment of Parkinson's Disease Motor Symptoms During Leg Agility Tests: Results From Levodopa Challenge. *Aghanavesi, S.*, +, *JBHI Jan. 2020 111-119*

MR-Forest: A Deep Decision Framework for False Positive Reduction in Pulmonary Nodule Detection. *Zhu, H.*, +, *JBHI June 2020 1652-1663*

MS-CAM: Multi-Scale Class Activation Maps for Weakly-Supervised Segmentation of Geographic Atrophy Lesions in SD-OCT Images. *Ma, X.*, +, *JBHI Dec. 2020 3443-3455*

Multi-Level Multi-Modality Fusion Radiomics: Application to PET and CT Imaging for Prognostication of Head and Neck Cancer. *Lv, W.*, +, *JBHI Aug. 2020 2268-2277*

Multi-Objective-Based Radiomic Feature Selection for Lesion Malignancy Classification. *Zhou, Z.*, +, *JBHI Jan. 2020 194-204*

Multilevel Features for Sensor-Based Assessment of Motor Fluctuation in Parkinson's Disease Subjects. *Ghoraani, B.*, +, *JBHI May 2020 1284-1295*

Multiple Axial Spine Indices Estimation via Dense Enhancing Network With Cross-Space Distance-Preserving Regularization. *Lin, L.*, +, *JBHI Nov. 2020 3248-3257*

Multiple Vowels Repair Based on Pitch Extraction and Line Spectrum Pair Feature for Voice Disorder. *Zhang, T.*, +, *JBHI July 2020 1940-1951*

Natural Language Generation Model for Mammography Reports Simulation. *Hoogi, A.*, +, *JBHI Sept. 2020 2711-2717*

Non-Contact Sleep Stage Detection Using Canonical Correlation Analysis of Respiratory Sound. *Xue, B.*, +, *JBHI Feb. 2020 614-625*

Objective Analysis of Neck Muscle Boundaries for Cervical Dystonia Using Ultrasound Imaging and Deep Learning. *Loram, I.*, +, *JBHI April 2020 1016-1027*

Patient-Specific Seizure Detection Using Nonlinear Dynamics and Nullclines. *Zabihi, M.*, +, *JBHI Feb. 2020 543-555*

PopPhy-CNN: A Phylogenetic Tree Embedded Architecture for Convolutional Neural Networks to Predict Host Phenotype From Metagenomic Data. *Reiman, D.*, +, *JBHI Oct. 2020 2993-3001*

Pulmonary Textures Classification via a Multi-Scale Attention Network. *Xu, R.*, +, *JBHI July 2020 2041-2052*

QuPWM: Feature Extraction Method for Epileptic Spike Classification. *Chahid, A.*, +, *JBHI Oct. 2020 2814-2824*

Radiomics-Based Assessment of Primary Sjögren's Syndrome From Salivary Gland Ultrasonography Images. *Vukicevic, A.M.*, +, *JBHI March 2020 835-843*

Real-Time Detection of Compensatory Patterns in Patients With Stroke to Reduce Compensation During Robotic Rehabilitation Therapy. *Cai, S.*, +, *JBHI Sept. 2020 2630-2638*

Real-World Gait Speed Estimation Using Wrist Sensor: A Personalized Approach. *Soltani, A.*, +, *JBHI March 2020 658-668*

Robust Fovea Localization Based on Symmetry Measure. *Guo, X.*, +, *JBHI Aug. 2020 2315-2326*

Segmenting Diabetic Retinopathy Lesions in Multispectral Images Using Low-Dimensional Spatial-Spectral Matrix Representation. *He, Y.*, +, *JBHI Feb. 2020 493-502*

Semi-Supervised Learning for Semantic Segmentation of Emphysema With Partial Annotations. *Peng, L.*, +, *JBHI Aug. 2020 2327-2336*

Separation of Fetal-ECG From Single-Channel Abdominal ECG Using Activation Scaled Non-Negative Matrix Factorization. *Gurve, D.*, +, *JBHI March 2020 669-680*

Sequential Saliency Guided Deep Neural Network for Joint Mitosis Identification and Localization in Time-Lapse Phase Contrast Microscopy Images. *Lu, Y.*, +, *JBHI May 2020 1367-1378*
Simultaneous Diagnosis of Severity and Features of Diabetic Retinopathy in Fundus Photography Using Deep Learning. *Wang, J.*, +, *JBHI Dec. 2020 3397-3407*
Studying the Manifold Structure of Alzheimer's Disease: A Deep Learning Approach Using Convolutional Autoencoders. *Martinez-Murcia, F.J.*, +, *JBHI Jan. 2020 17-26*
Tear Film Classification in Interferometry Eye Images Using Phylogenetic Diversity Indexes and Ripley's K Function. *da Cruz, L.B.*, +, *JBHI Dec. 2020 3491-3498*
Thorax-Net: An Attention Regularized Deep Neural Network for Classification of Thoracic Diseases on Chest Radiography. *Wang, H.*, +, *JBHI Feb. 2020 475-485*
Toward a Wearable System for Predicting Freezing of Gait in People Affected by Parkinson's Disease. *Demrozi, F.*, +, *JBHI Sept. 2020 2444-2451*
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Canonical Correlation Analysis of Imaging Genetics Data Based on Statistical Independence and Structural Sparsity. *Zhang, Y.*, +, *JBHI Sept. 2020 2621-2629*
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Filtering theory
Delineation of Electrocardiograms Using Multiscale Parameter Estimation. *Spicher, N.*, +, *JBHI Aug. 2020 2216-2229*
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Finite element analysis
Bi-Frequency Symmetry Difference EIT—Feasibility and Limitations of Application to Stroke Diagnosis. *McDermott, B.*, +, *JBHI Aug. 2020 2407-2419*

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Towards Domain Invariant Heart Sound Abnormality Detection Using Learnable Filterbanks. *Humayun, A.I.*, +, *JBHI Aug. 2020 2189-2198*

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Food products
Hierarchical Approach to Classify Food Scenes in Egocentric Photo-Streams. *Martinez, E.T.*, +, *JBHI March 2020 866-877*

Food safety
Image-Based Food Classification and Volume Estimation for Dietary Assessment: A Review. *Lo, F.P.W.*, +, *JBHI July 2020 1926-1939*

Force measurement
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Formal verification
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Detection of Gait From Continuous Inertial Sensor Data Using Harmonic Frequencies. *Ullrich, M.*, +, *JBHI July 2020 1869-1878*
Efficient and Robust Skeleton-Based Quality Assessment and Abnormality Detection in Human Action Performance. *Elkholy, A.*, +, *JBHI Jan. 2020 280-291*
Estimation of Stride Time Variability in Unobtrusive Long-Term Monitoring Using Inertial Measurement Sensors. *Lueken, M.*, +, *JBHI July 2020 1879-1886*
Estimation of Vertical Ground Reaction Force Using Low-Cost Insole With Force Plate-Free Learning From Single Leg Stance and Walking. *Eguchi, R.*, +, *JBHI May 2020 1276-1283*
Models of Parkinson's Disease Patient Gait. *Hughes, J.A.*, +, *JBHI Nov. 2020 3103-3110*
Motion Sensor-Based Assessment of Parkinson's Disease Motor Symptoms During Leg Agility Tests: Results From Levodopa Challenge. *Aghanavesi, S.*, +, *JBHI Jan. 2020 111-119*
Real-World Gait Speed Estimation Using Wrist Sensor: A Personalized Approach. *Soltani, A.*, +, *JBHI March 2020 658-668*
Smartphone-Based Assessment of Gait During Straight Walking, Turning, and Walking Speed Modulation in Laboratory and Free-Living Environments. *Silsupadol, P.*, +, *JBHI April 2020 1188-1195*
Technical Validation of an Automated Mobile Gait Analysis System for Hereditary Spastic Paraplegia Patients. *Martindale, C.F.*, +, *JBHI May 2020 1490-1499*
Toward a Wearable System for Predicting Freezing of Gait in People Affected by Parkinson's Disease. *Demrozi, F.*, +, *JBHI Sept. 2020 2444-2451*
Vision-Based Freezing of Gait Detection With Anatomic Directed Graph Representation. *Hu, K.*, +, *JBHI April 2020 1215-1225*

Gaussian distribution
A Novel Intelligent Computational Approach to Model Epidemiological Trends and Assess the Impact of Non-Pharmacological Interventions for COVID-19. *Ren, J.*, +, *JBHI Dec. 2020 3551-3563*
Adaptive-Guided-Coupling-Probability Level Set for Retinal Layer Segmentation. *Sun, Y.*, +, *JBHI Nov. 2020 3236-3247*

Gaussian noise
Blind Equalization of Lung Crackle Sounds to Compensate Chest Attenuation. *Speranza, C.G.*, +, *JBHI June 2020 1796-1804*

Gaussian processes
A Markov-Switching Model Approach to Heart Sound Segmentation and Classification. *Noman, F.*, +, *JBHI March 2020 705-716*
Automatic Scale Severity Assessment Method in Psoriasis Skin Images Using Local Descriptors. *George, Y.*, +, *JBHI Feb. 2020 577-585*

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Augmenting Dementia Cognitive Assessment With Instruction-Less Eye-Tracking Tests. *Mengoudi, K.*, +, *JBHI Nov. 2020 3066-3075*

Generative adversarial networks
Automatic Segmentation and Visualization of Choroid in OCT with Knowledge Infused Deep Learning. *Zhang, H.*, +, *JBHI Dec. 2020 3408-3420*
Dehaze of Cataractous Retinal Images Using an Unpaired Generative Adversarial Network. *Luo, Y.*, +, *JBHI Dec. 2020 3374-3383*

Genetic algorithms
Models of Parkinson's Disease Patient Gait. *Hughes, J.A.*, +, *JBHI Nov. 2020 3103-3110*
Radiomics-Based Assessment of Primary Sjögren's Syndrome From Salivary Gland Ultrasonography Images. *Vukicevic, A.M.*, +, *JBHI March 2020 835-843*

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Guest Editorial Ophthalmic Image Analysis and Informatics. *Cheng, J.*, +, *JBHI Dec. 2020 3335-3337*
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Anonymization Through Data Synthesis Using Generative Adversarial Networks (ADS-GAN). *Yoon, J.*, +, *JBHI Aug. 2020 2378-2388*

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Efficient and Robust Skeleton-Based Quality Assessment and Abnormality Detection in Human Action Performance. *Elkholy, A.*, +, *JBHI Jan. 2020 280-291*

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Implicit Irregularity Detection Using Unsupervised Learning on Daily Behaviors. *Shang, C.*, +, *JBHI Jan. 2020 131-143*

Integrated Security, Safety, and Privacy Risk Assessment Framework for Medical Devices. *Yaqoob, T.*, +, *JBHI June 2020 1752-1761*

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Classification of Cancer Pathology Reports: A Large-Scale Comparative Study. *Martina, S.*, +, *JBHI Nov. 2020 3085-3094*

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Clinical Interpretable Deep Learning Model for Glaucoma Diagnosis. *Liao, W.*, +, *JBHI May 2020 1405-1412*

Coarse-to-Fine Adversarial Networks and Zone-Based Uncertainty Analysis for NK/T-Cell Lymphoma Segmentation in CT/PET Images. *Hu, X.*, +, *JBHI Sept. 2020 2599-2608*

Constructing a Personalized Cross-Day EEG-Based Emotion-Classification Model Using Transfer Learning. *Lin, Y., JBHI May 2020 1255-1264*

Context-Aware Delivery of Ecological Momentary Assessment. *Aminikhanghahi, S.*, +, *JBHI April 2020 1206-1214*

Contrastive Cross-Site Learning With Redesigned Net for COVID-19 CT Classification. *Wang, Z.*, +, *JBHI Oct. 2020 2806-2813*

Convolutional Recurrent Neural Networks for Glucose Prediction. *Li, K.*, +, *JBHI Feb. 2020 603-613*

CR-Unet: A Composite Network for Ovary and Follicle Segmentation in Ultrasound Images. *Li, H.*, +, *JBHI April 2020 974-983*

Decoding Brain States From fMRI Signals by Using Unsupervised Domain Adaptation. *Gao, Y.*, +, *JBHI June 2020 1677-1685*

Deep Interpretable Early Warning System for the Detection of Clinical Deterioration. *Shamout, F.E.*, +, *JBHI Feb. 2020 437-446*

Deep Learning Classification of Neuro-Emotional Phase Domain Complexity Levels Induced by Affective Video Film Clips. *Aydin, S., JBHI June 2020 1695-1702*

Deep Learning for Fall Risk Assessment With Inertial Sensors: Utilizing Domain Knowledge in Spatio-Temporal Gait Parameters. *Tunca, C.*, +, *JBHI July 2020 1994-2005*

Deep Learning for Smartphone-Based Malaria Parasite Detection in Thick Blood Smears. *Yang, F.*, +, *JBHI May 2020 1427-1438*

Deep Learning on Computerized Analysis of Chronic Obstructive Pulmonary Disease. *Altan, G.*, +, *JBHI May 2020 1344-1350*

Deep Learning-Based Classification of Liver Cancer Histopathology Images Using Only Global Labels. *Sun, C.*, +, *JBHI June 2020 1643-1651*

Deep Learning-Based Gleason Grading of Prostate Cancer From Histopathology Images—Role of Multiscale Decision Aggregation and Data Augmentation. *Karimi, D.*, +, *JBHI May 2020 1413-1426*

Deep Multi-Scale Fusion Neural Network for Multi-Class Arrhythmia Detection. *Wang, R.*, +, *JBHI Sept. 2020 2461-2472*

Deep Neural Networks for Survival Analysis Using Pseudo Values. *Zhao, L.*, +, *JBHI Nov. 2020 3308-3314*

Deep Residual Inception Encoder–Decoder Network for Medical Imaging Synthesis. *Gao, F.*, +, *JBHI Jan. 2020 39-49*

Deep Sentiment Classification and Topic Discovery on Novel Coronavirus or COVID-19 Online Discussions: NLP Using LSTM Recurrent Neural Network Approach. *Jelodar, H.*, +, *JBHI Oct. 2020 2733-2742*

DeepAVP: A Dual-Channel Deep Neural Network for Identifying Variable-Length Antiviral Peptides. *Li, J.*, +, *JBHI Oct. 2020 3012-3019*

Detecting Parkinsonian Tremor From IMU Data Collected in-the-Wild Using Deep Multiple-Instance Learning. *Papadopoulos, A.*, +, *JBHI Sept. 2020 2559-2569*

Detecting Suspected Pump Thrombosis in Left Ventricular Assist Devices via Acoustic Analysis. *Semiz, B.*, +, *JBHI July 2020 1899-1906*

Development of a Wearable Electrical Impedance Tomographic Sensor for Gesture Recognition With Machine Learning. *Yao, J.*, +, *JBHI June 2020 1550-1556*

Diagnosis of Benign and Malignant Thyroid Nodules Using Combined Conventional Ultrasound and Ultrasound Elasticity Imaging. *Qin, P.*, +, *JBHI April 2020 1028-1036*

Discovering the Type 2 Diabetes in Electronic Health Records Using the Sparse Balanced Support Vector Machine. *Bernardini, M.*, +, *JBHI Jan. 2020 235-246*

DNA-SeAl: Sensitivity Levels to Optimize the Performance of Privacy-Preserving DNA Alignment. *Fernandes, M.*, +, *JBHI March 2020 907-915*

Dynamic Prediction in Clinical Survival Analysis Using Temporal Convolutional Networks. *Jarrett, D.*, +, *JBHI Feb. 2020 424-436*

Early and Late Fusion Machine Learning on Multi-Frequency Electrical Impedance Data to Improve Radiofrequency Ablation Monitoring. *Besler, E.*, +, *JBHI Aug. 2020 2359-2367*

Efficient Activity Recognition in Smart Homes Using Delayed Fuzzy Temporal Windows on Binary Sensors. *Hamad, R.A.*, +, *JBHI Feb. 2020 387-395*

Efficient and Effective Training of COVID-19 Classification Networks With Self-Supervised Dual-Track Learning to Rank. *Li, Y.*, +, *JBHI Oct. 2020 2787-2797*

Electrodermal Activity Based Pre-surgery Stress Detection Using a Wrist Wearable. *S., A.A.*, +, *JBHI Jan. 2020 92-100*

EMR-Based Phenotyping of Ischemic Stroke Using Supervised Machine Learning and Text Mining Techniques. *Sung, S.*, +, *JBHI Oct. 2020 2922-2931*

Epileptic Seizure Classification With Symmetric and Hybrid Bilinear Models. *Liu, T.*, +, *JBHI Oct. 2020 2844-2851*

Estimation of Vertical Ground Reaction Force Using Low-Cost Insole With Force Plate-Free Learning From Single Leg Stance and Walking. *Eguchi, R.*, +, *JBHI May 2020 1276-1283*

Evaluating and Enhancing the Generalization Performance of Machine Learning Models for Physical Activity Intensity Prediction From Raw Acceleration Data. *Farrahi, V.*, +, *JBHI Jan. 2020 27-38*

Evaluation of Machine Learning Models for Classifying Upper Extremity Exercises Using Inertial Measurement Unit-Based Kinematic Data. *Hua, A.*, +, *JBHI Sept. 2020 2452-2460*

Exploration of Chinese Sign Language Recognition Using Wearable Sensors Based on Deep Belief Net. *Yu, Y.*, +, *JBHI May 2020 1310-1320*

Falls Risk Classification of Older Adults Using Deep Neural Networks and Transfer Learning. *Martinez, M.*, +, *JBHI Jan. 2020 144-150*

GluNet: A Deep Learning Framework for Accurate Glucose Forecasting. *Li, K.*, +, *JBHI Feb. 2020 414-423*

GoogLeNet-Based Ensemble FCNet Classifier for Focal Liver Lesion Diagnosis. *Balagourouchetty, L.*, +, *JBHI June 2020 1686-1694*

GP-CNN-DTEL: Global-Part CNN Model With Data-Transformed Ensemble Learning for Skin Lesion Classification. *Tang, P.*, +, *JBHI Oct. 2020 2870-2882*

Heart Sound Segmentation Using Bidirectional LSTMs With Attention. *Fernando, T.*, +, *JBHI June 2020 1601-1609*

Hierarchical Class Incremental Learning of Anatomical Structures in Fetal Echocardiography Videos. *Patra, A.*, +, *JBHI April 2020 1046-1058*

Hyper-Graph Regularized Constrained NMF for Selecting Differentially Expressed Genes and Tumor Classification. *Jiao, C.*, +, *JBHI Oct. 2020 3002-3011*

Image-Based Food Classification and Volume Estimation for Dietary Assessment: A Review. *Lo, F.P.W.*, +, *JBHI July 2020 1926-1939*

Improving Automatic Polyp Detection Using CNN by Exploiting Temporal Dependency in Colonoscopy Video. *Qadir, H.A.*, +, *JBHI Jan. 2020 180-193*

Inaccurate Labels in Weakly-Supervised Deep Learning: Automatic Identification and Correction and Their Impact on Classification Performance. *Hao, D.*, +, *JBHI Sept. 2020 2701-2710*

Inferring Gene Regulatory Networks of Metabolic Enzymes Using Gradient Boosted Trees. *Zhang, Y.*, +, *JBHI May 2020 1528-1536*

Inter-Patient ECG Classification With Symbolic Representations and Multi-Perspective Convolutional Neural Networks. *Niu, J.*, +, *JBHI May 2020 1321-1332*

Introducing the GEV Activation Function for Highly Unbalanced Data to Develop COVID-19 Diagnostic Models. *Bridge, J.*, +, *JBHI Oct. 2020 2776-2786*

Joint Prediction of Breast Cancer Histological Grade and Ki-67 Expression Level Based on DCE-MRI and DWI Radiomics. *Fan, M.*, +, *JBHI June 2020 1632-1642*

Label Co-Occurrence Learning With Graph Convolutional Networks for Multi-Label Chest X-Ray Image Classification. *Chen, B.*, +, *JBHI Aug. 2020 2292-2302*

Learning Brain Effective Connectivity Network Structure Using Ant Colony Optimization Combining With Voxel Activation Information. *Liu, J.*, +, *JBHI July 2020 2028-2040*

Learning Deep Representations for Video-Based Intake Gesture Detection. *Rouast, P.V.*, +, *JBHI June 2020 1727-1737*

Learning to Quantify Emphysema Extent: What Labels Do We Need?. *Orting, S.N.*, +, *JBHI April 2020 1149-1159*

Length-of-Stay Prediction for Pediatric Patients With Respiratory Diseases Using Decision Tree Methods. *Ma, F.*, +, *JBHI Sept. 2020 2651-2662*

Lesion Location Attention Guided Network for Multi-Label Thoracic Disease Classification in Chest X-Rays. *Chen, B.*, +, *JBHI July 2020 2016-2027*

Localizing B-Lines in Lung Ultrasonography by Weakly Supervised Deep Learning, *In-Vivo* Results. *van Sloun, R.J.G.*, +, *JBHI April 2020 957-964*

LSTM-Based ECG Classification for Continuous Monitoring on Personal Wearable Devices. *Saadatnejad, S.*, +, *JBHI Feb. 2020 515-523*

Machine Learning Based Suicide Ideation Prediction for Military Personnel. *Lin, G.*, +, *JBHI July 2020 1907-1916*

Machine Listening for Heart Status Monitoring: Introducing and Benchmarking HSS—The Heart Sounds Shenzhen Corpus. *Dong, F.*, +, *JBHI July 2020 2082-2092*

Matrix Factorization-based Technique for Drug Repurposing Predictions. *Ceddia, G.*, +, *JBHI Nov. 2020 3162-3172*

MediMLP: Using Grad-CAM to Extract Crucial Variables for Lung Cancer Postoperative Complication Prediction. *He, T.*, +, *JBHI June 2020 1762-1771*

MFB-CBRNN: A Hybrid Network for MI Detection Using 12-Lead ECGs. *Liu, W.*, +, *JBHI Feb. 2020 503-514*

Mitochondria Segmentation From EM Images via Hierarchical Structured Contextual Forest. *Peng, J.*, +, *JBHI Aug. 2020 2251-2259*

Mitral Annulus Segmentation Using Deep Learning in 3-D Transesophageal Echocardiography. *Andreassen, B.S.*, +, *JBHI April 2020 994-1003*

Motion Sensor-Based Assessment of Parkinson's Disease Motor Symptoms During Leg Agility Tests: Results From Levodopa Challenge. *Aghanavesi, S.*, +, *JBHI Jan. 2020 111-119*

Motor Imagery Classification via Temporal Attention Cues of Graph Embedded EEG Signals. *Zhang, D.*, +, *JBHI Sept. 2020 2570-2579*

MR-Forest: A Deep Decision Framework for False Positive Reduction in Pulmonary Nodule Detection. *Zhu, H.*, +, *JBHI June 2020 1652-1663*

MRLN: Multi-Task Relational Learning Network for MRI Vertebral Localization, Identification, and Segmentation. *Zhang, R.*, +, *JBHI Oct. 2020 2902-2911*

Multi-Modal Diagnosis of Infectious Diseases in the Developing World. *Tadesse, G.A.*, +, *JBHI July 2020 2131-2141*

Multi-Objective Optimization for Personalized Prediction of Venous Thromboembolism in Ovarian Cancer Patients. *Fresard, M.E.*, +, *JBHI May 2020 1500-1508*

Multi-Objective-Based Radiomic Feature Selection for Lesion Malignancy Classification. *Zhou, Z.*, +, *JBHI Jan. 2020 194-204*

Multi-Task Joint Learning Model for Segmenting and Classifying Tongue Images Using a Deep Neural Network. *Xu, Q.*, +, *JBHI Sept. 2020 2481-2489*

Multimodal Sparse Classifier for Adolescent Brain Age Prediction. *Kassani, P.H.*, +, *JBHI Feb. 2020 336-344*

Multiple Axial Spine Indices Estimation via Dense Enhancing Network With Cross-Space Distance-Preserving Regularization. *Lin, L.*, +, *JBHI Nov. 2020 3248-3257*

Natural Language Generation Model for Mammography Reports Simulation. *Hoogi, A.*, +, *JBHI Sept. 2020 2711-2717*

Non-Invasive Estimation of Hemoglobin Using a Multi-Model Stacking Regressor. *Acharya, S.*, +, *JBHI June 2020 1717-1726*

Non-Standardized Patch-Based ECG Lead Together With Deep Learning Based Algorithm for Automatic Screening of Atrial Fibrillation. *Lai, D.*, +, *JBHI June 2020 1569-1578*

Objective ADHD Diagnosis Using Convolutional Neural Networks Over Daily-Life Activity Records. *Amado-Caballero, P.*, +, *JBHI Sept. 2020 2690-2700*

Objective Analysis of Neck Muscle Boundaries for Cervical Dystonia Using Ultrasound Imaging and Deep Learning. *Loram, I.*, +, *JBHI April 2020 1016-1027*

On Clinical Event Prediction in Patient Treatment Trajectory Using Longitudinal Electronic Health Records. *Duan, H.*, +, *JBHI July 2020 2053-2063*

PlethAugment: GAN-Based PPG Augmentation for Medical Diagnosis in Low-Resource Settings. *Kiyasseh, D.*, +, *JBHI Nov. 2020 3226-3235*

PopPhy-CNN: A Phylogenetic Tree Embedded Architecture for Convolutional Neural Networks to Predict Host Phenotype From Metagenomic Data. *Reiman, D.*, +, *JBHI Oct. 2020 2993-3001*

Portable Detection of Apnea and Hypopnea Events Using Bio-Impedance of the Chest and Deep Learning. *Van Steenkiste, T.*, +, *JBHI Sept. 2020 2589-2598*

Predicting Hospital Readmission: A Joint Ensemble-Learning Model. *Yu, K.*, +, *JBHI Feb. 2020 447-456*

Predicting Quality of Overnight Glycaemic Control in Type 1 Diabetes Using Binary Classifiers. *Guemes, A.*, +, *JBHI May 2020 1439-1446*

Progressive Sub-Band Residual-Learning Network for MR Image Super Resolution. *Xue, X.*, +, *JBHI Feb. 2020 377-386*

Progressive Transfer Learning and Adversarial Domain Adaptation for Cross-Domain Skin Disease Classification. *Gu, Y.*, +, *JBHI May 2020 1379-1393*

Pulmonary Textures Classification via a Multi-Scale Attention Network. *Xu, R.*, +, *JBHI July 2020 2041-2052*

Q-Rank: Reinforcement Learning for Recommending Algorithms to Predict Drug Sensitivity to Cancer Therapy. *Daoud, S.*, +, *JBHI Nov. 2020 3154-3161*

Quantifying the Impact of Resuscitation-Team Activation in Hospital Emergency Departments. *Xian, X.*, +, *JBHI Oct. 2020 3029-3037*

QuPWM: Feature Extraction Method for Epileptic Spike Classification. *Chahid, A.*, +, *JBHI Oct. 2020 2814-2824*

Real-Time Detection of Compensatory Patterns in Patients With Stroke to Reduce Compensation During Robotic Rehabilitation Therapy. *Cai, S.*, +, *JBHI Sept. 2020 2630-2638*

Real-World Gait Speed Estimation Using Wrist Sensor: A Personalized Approach. *Soltani, A.*, +, *JBHI March 2020 658-668*
Relative Afferent Pupillary Defect Screening Through Transfer Learning. *Temel, D.*, +, *JBHI March 2020 788-795*
Robust Fovea Localization Based on Symmetry Measure. *Guo, X.*, +, *JBHI Aug. 2020 2315-2326*
Robust Heart Rate Monitoring for Quasi-Periodic Motions by Wrist-Type PPG Signals. *He, W.*, +, *JBHI March 2020 636-648*
Screening For Depression With Retrospectively Harvested Private Versus Public Text. *Tlachac, M.*, +, *JBHI Nov. 2020 3326-3332*
Semi-Supervised Learning Algorithm for Identifying High-Priority Drug–Drug Interactions Through Adverse Event Reports. *Liu, N.*, +, *JBHI Jan. 2020 57-68*
Semi-Supervised Learning for Semantic Segmentation of Emphysema With Partial Annotations. *Peng, L.*, +, *JBHI Aug. 2020 2327-2336*
Sequential Saliency Guided Deep Neural Network for Joint Mitosis Identification and Localization in Time-Lapse Phase Contrast Microscopy Images. *Lu, Y.*, +, *JBHI May 2020 1367-1378*
Single Volume Image Generator and Deep Learning-Based ASD Classification. *Ahmed, M.R.*, +, *JBHI Nov. 2020 3044-3054*
Snore-GANs: Improving Automatic Snore Sound Classification With Synthesized Data. *Zhang, Z.*, +, *JBHI Jan. 2020 300-310*
Studying the Manifold Structure of Alzheimer's Disease: A Deep Learning Approach Using Convolutional Autoencoders. *Martinez-Murcia, F.J.*, +, *JBHI Jan. 2020 17-26*
TAPER: Time-Aware Patient EHR Representation. *Darabi, S.*, +, *JBHI Nov. 2020 3268-3275*
The Use of Data Mining Methods for the Prediction of Dementia: Evidence From the English Longitudinal Study of Aging. *Yang, H.*, +, *JBHI Feb. 2020 345-353*
Thorax-Net: An Attention Regularized Deep Neural Network for Classification of Thoracic Diseases on Chest Radiography. *Wang, H.*, +, *JBHI Feb. 2020 475-485*
Toward a Better Estimation of Functional Brain Network for Mild Cognitive Impairment Identification: A Transfer Learning View. *Li, W.*, +, *JBHI April 2020 1160-1168*
Toward a Wearable System for Predicting Freezing of Gait in People Affected by Parkinson's Disease. *Demrozi, F.*, +, *JBHI Sept. 2020 2444-2451*
TSE-CNN: A Two-Stage End-to-End CNN for Human Activity Recognition. *Huang, J.*, +, *JBHI Jan. 2020 292-299*
Using a Multi-Task Recurrent Neural Network With Attention Mechanisms to Predict Hospital Mortality of Patients. *Yu, R.*, +, *JBHI Feb. 2020 486-492*
Using Deep Learning in Ultrasound Imaging of Bicipital Peritendinous Effusion to Grade Inflammation Severity. *Lin, B.*, +, *JBHI April 2020 1037-1045*
Using Intelligent Personal Annotations to Improve Human Activity Recognition for Movements in Natural Environments. *Akbari, A.*, +, *JBHI Sept. 2020 2639-2650*
Vision-Based Freezing of Gait Detection With Anatomic Directed Graph Representation. *Hu, K.*, +, *JBHI April 2020 1215-1225*

Legislation

Integrated Security, Safety, and Privacy Risk Assessment Framework for Medical Devices. *Yaqoob, T.*, +, *JBHI June 2020 1752-1761*

Lesions

How to Extract More Information With Less Burden: Fundus Image Classification and Retinal Disease Localization With Ophthalmologist Intervention. *Meng, Q.*, +, *JBHI Dec. 2020 3351-3361*
M^{3}Lung-Sys: A Deep Learning System for Multi-Class Lung Pneumonia Screening From CT Imaging. *Qian, X.*, +, *JBHI Dec. 2020 3539-3550*
Machine Learning Techniques for Ophthalmic Data Processing: A Review. *Sarhan, M.H.*, +, *JBHI Dec. 2020 3338-3350*
MS-CAM: Multi-Scale Class Activation Maps for Weakly-Supervised Segmentation of Geographic Atrophy Lesions in SD-OCT Images. *Ma, X.*, +, *JBHI Dec. 2020 3443-3455*

Lipidomics

Tear Film Classification in Interferometry Eye Images Using Phylogenetic Diversity Indexes and Ripley's K Function. *da Cruz, L.B.*, +, *JBHI Dec. 2020 3491-3498*

Lips

Corrections to “Human–Computer Interface Controlled by the Lip”. *Jose, M.A.*, +, *JBHI Sept. 2020 2727*

Liver

Computational Identification of RNA-Seq Based miRNA-Mediated Prognostic Modules in Cancer. *Pan, C.*, +, *JBHI Feb. 2020 626-633*
Deep Learning-Based Classification of Liver Cancer Histopathology Images Using Only Global Labels. *Sun, C.*, +, *JBHI June 2020 1643-1651*
Detection and Monitoring of Thermal Lesions Induced by Microwave Ablation Using Ultrasound Imaging and Convolutional Neural Networks. *Zhang, S.*, +, *JBHI April 2020 965-973*
Differential Diagnosis of Atypical Hepatocellular Carcinoma in Contrast-Enhanced Ultrasound Using Spatio-Temporal Diagnostic Semantics. *Huang, Q.*, +, *JBHI Oct. 2020 2860-2869*
GoogLeNet-Based Ensemble FCNet Classifier for Focal Liver Lesion Diagnosis. *Balagourouchetty, L.*, +, *JBHI June 2020 1686-1694*

Low-pass filters

Three-Layer Image Representation by an Enhanced Illumination-Based Image Fusion Method. *Du, J.*, +, *JBHI April 2020 1169-1179*

Lung

A Deep Learning Prognosis Model Help Alert for COVID-19 Patients at High-Risk of Death: A Multi-Center Study. *Meng, L.*, +, *JBHI Dec. 2020 3576-3584*
A Two-Stage Convolutional Neural Networks for Lung Nodule Detection. *Cao, H.*, +, *JBHI July 2020 2006-2015*
Adaptive Feature Selection Guided Deep Forest for COVID-19 Classification With Chest CT. *Sun, L.*, +, *JBHI Oct. 2020 2798-2805*
Automatic Detection of Ventilations During Mechanical Cardiopulmonary Resuscitation. *Jaureguibeitia, X.*, +, *JBHI Sept. 2020 2580-2588*
Automatic Lung Nodule Detection Combined With Gaze Information Improves Radiologists' Screening Performance. *Aresta, G.*, +, *JBHI Oct. 2020 2894-2901*
Blind Equalization of Lung Crackle Sounds to Compensate Chest Attenuation. *Speranza, C.G.*, +, *JBHI June 2020 1796-1804*
Blind Monaural Source Separation on Heart and Lung Sounds Based on Periodic-Coded Deep Autoencoder. *Tsai, K.*, +, *JBHI Nov. 2020 3203-3214*
Classification of Severe and Critical Covid-19 Using Deep Learning and Radiomics. *Li, C.*, +, *JBHI Dec. 2020 3585-3594*
CRSIDLab: A Toolbox for Multivariate Autonomic Nervous System Analysis Using Cardiorespiratory Identification. *Da Silva, L.S.C.B.*, +, *JBHI March 2020 728-734*
Cryptotanshinone Induces Cell Death in Lung Cancer by Targeting Aberrant Feedback Loops. *Vundavilli, H.*, +, *JBHI Aug. 2020 2430-2438*
Deep Learning on Computerized Analysis of Chronic Obstructive Pulmonary Disease. *Altan, G.*, +, *JBHI May 2020 1344-1350*
Inferring Gene Regulatory Networks of Metabolic Enzymes Using Gradient Boosted Trees. *Zhang, Y.*, +, *JBHI May 2020 1528-1536*
Knowledge-Based Analysis for Mortality Prediction From CT Images. *Guo, H.*, +, *JBHI Feb. 2020 457-464*
Learning to Quantify Emphysema Extent: What Labels Do We Need?. *Orting, S.N.*, +, *JBHI April 2020 1149-1159*
Localizing B-Lines in Lung Ultrasonography by Weakly Supervised Deep Learning, *In-Vivo* Results. *van Sloun, R.J.G.*, +, *JBHI April 2020 957-964*
M^{3}Lung-Sys: A Deep Learning System for Multi-Class Lung Pneumonia Screening From CT Imaging. *Qian, X.*, +, *JBHI Dec. 2020 3539-3550*
MediMLP: Using Grad-CAM to Extract Crucial Variables for Lung Cancer Postoperative Complication Prediction. *He, T.*, +, *JBHI June 2020 1762-1771*
MR-Forest: A Deep Decision Framework for False Positive Reduction in Pulmonary Nodule Detection. *Zhu, H.*, +, *JBHI June 2020 1652-1663*
Multi-Objective-Based Radiomic Feature Selection for Lesion Malignancy Classification. *Zhou, Z.*, +, *JBHI Jan. 2020 194-204*
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Pulmonary Textures Classification via a Multi-Scale Attention Network. *Xu, R.*, +, *JBHI July 2020 2041-2052*
Semi-Supervised Learning for Semantic Segmentation of Emphysema With Partial Annotations. *Peng, L.*, +, *JBHI Aug. 2020 2327-2336*
Severity and Consolidation Quantification of COVID-19 From CT Images Using Deep Learning Based on Hybrid Weak Labels. *Wu, D.*, +, *JBHI Dec. 2020 3529-3538*

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Manipulator dynamics
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REMPE: Registration of Retinal Images Through Eye Modelling and Pose Estimation. *Hernandez-Matas, C.*, +, *JBHI Dec. 2020 3362-3373*
Matrix algebra
PopPhy-CNN: A Phylogenetic Tree Embedded Architecture for Convolutional Neural Networks to Predict Host Phenotype From Metagenomic Data. *Reiman, D.*, +, *JBHI Oct. 2020 2993-3001*
Segmenting Diabetic Retinopathy Lesions in Multispectral Images Using Low-Dimensional Spatial-Spectral Matrix Representation. *He, Y.*, +, *JBHI Feb. 2020 493-502*
Matrix decomposition
A Novel Intelligent Computational Approach to Model Epidemiological Trends and Assess the Impact of Non-Pharmacological Interventions for COVID-19. *Ren, J.*, +, *JBHI Dec. 2020 3551-3563*
Constrained Tensor Decomposition for Longitudinal Analysis of Diffusion Imaging Data. *Stamile, C.*, +, *JBHI April 2020 1137-1148*
Hyper-Graph Regularized Constrained NMF for Selecting Differentially Expressed Genes and Tumor Classification. *Jiao, C.*, +, *JBHI Oct. 2020 3002-3011*
Matrix Factorization-based Technique for Drug Repurposing Predictions. *Ceddia, G.*, +, *JBHI Nov. 2020 3162-3172*
Separation of Fetal-ECG From Single-Channel Abdominal ECG Using Activation Scaled Non-Negative Matrix Factorization. *Gurve, D.*, +, *JBHI March 2020 669-680*
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GluNet: A Deep Learning Framework for Accurate Glucose Forecasting. *Li, K.*, +, *JBHI Feb. 2020 414-423*
Non-Invasive Estimation of Hemoglobin Using a Multi-Model Stacking Regressor. *Acharya, S.*, +, *JBHI June 2020 1717-1726*
Seasonal Local Models for Glucose Prediction in Type 1 Diabetes. *Montaser, E.*, +, *JBHI July 2020 2064-2072*
Mechanoception
Estimation of Vertical Ground Reaction Force Using Low-Cost Insole With Force Plate-Free Learning From Single Leg Stance and Walking. *Eguchi, R.*, +, *JBHI May 2020 1276-1283*
Medical administrative data processing
Automated Surgical Term Clustering: A Text Mining Approach for Unstructured Textual Surgery Descriptions. *Khaleghi, T.*, +, *JBHI July 2020 2107-2118*
Automatic Medical Code Assignment via Deep Learning Approach for Intelligent Healthcare. *Teng, F.*, +, *JBHI Sept. 2020 2506-2515*
Deep Sentiment Classification and Topic Discovery on Novel Coronavirus or COVID-19 Online Discussions: NLP Using LSTM Recurrent Neural Network Approach. *Jelodar, H.*, +, *JBHI Oct. 2020 2733-2742*
Predicting Hospital Readmission: A Joint Ensemble-Learning Model. *Yu, K.*, +, *JBHI Feb. 2020 447-456*
Quantifying the Impact of Resuscitation-Team Activation in Hospital Emergency Departments. *Xian, X.*, +, *JBHI Oct. 2020 3029-3037*
Medical computing
A Novel MKL Method for GBM Prognosis Prediction by Integrating Histopathological Image and Multi-Omics Data. *Zhang, Y.*, +, *JBHI Jan. 2020 171-179*
A Resampling Based Grid Search Method to Improve Reliability and Robustness of Mixture-Item Response Theory Models of Multimorbid High-Risk Patients. *Batten, A.J.*, +, *JBHI June 2020 1780-1787*
Aceso: PICO-Guided Evidence Summarization on Medical Literature. *Zhang, X.*, +, *JBHI Sept. 2020 2663-2670*
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Medical disorders

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Bi-Modality Medical Image Synthesis Using Semi-Supervised Sequential Generative Adversarial Networks. *Yang, X.*, +, *JBHI March 2020 855-865*

Bimodal Automated Carotid Ultrasound Segmentation Using Geometrically Constrained Deep Neural Networks. *Azzopardi, C.*, +, *JBHI April 2020 1004-1015*

Blood Cell Classification Based on Hyperspectral Imaging With Modulated Gabor and CNN. *Huang, Q.*, +, *JBHI Jan. 2020 160-170*

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Classifying Depression Severity in Recovery From Major Depressive Disorder via Dynamic Facial Features. *Harati, S.*, +, *JBHI March 2020 815-824*

Clinical Interpretable Deep Learning Model for Glaucoma Diagnosis. *Liao, W.*, +, *JBHI May 2020 1405-1412*

Coarse-to-Fine Adversarial Networks and Zone-Based Uncertainty Analysis for NK/T-Cell Lymphoma Segmentation in CT/PET Images. *Hu, X.*, +, *JBHI Sept. 2020 2599-2608*

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Contrastive Cross-Site Learning With Redesigned Net for COVID-19 CT Classification. *Wang, Z.*, +, *JBHI Oct. 2020 2806-2813*

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Data-Driven Analysis of Radiologists' Behavior for Diagnosing Thyroid Nodules. *Chang, L.*, +, *JBHI Nov. 2020 3111-3123*

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Deep Learning for Smartphone-Based Malaria Parasite Detection in Thick Blood Smears. *Yang, F.*, +, *JBHI May 2020 1427-1438*

Deep Learning-Based Classification of Liver Cancer Histopathology Images Using Only Global Labels. *Sun, C.*, +, *JBHI June 2020 1643-1651*

Deep Learning-Based Gleason Grading of Prostate Cancer From Histopathology Images—Role of Multiscale Decision Aggregation and Data Augmentation. *Karimi, D.*, +, *JBHI May 2020 1413-1426*

Deep Residual Inception Encoder–Decoder Network for Medical Imaging Synthesis. *Gao, F.*, +, *JBHI Jan. 2020 39-49*

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Differential Diagnosis of Atypical Hepatocellular Carcinoma in Contrast-Enhanced Ultrasound Using Spatio-Temporal Diagnostic Semantics. *Huang, Q.*, +, *JBHI Oct. 2020 2860-2869*

Direct Cup-to-Disc Ratio Estimation for Glaucoma Screening via Semi-Supervised Learning. *Zhao, R.*, +, *JBHI April 2020 1104-1113*

Dynamic Prediction in Clinical Survival Analysis Using Temporal Convolutional Networks. *Jarrett, D.*, +, *JBHI Feb. 2020 424-436*

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Efficient and Effective Training of COVID-19 Classification Networks With Self-Supervised Dual-Track Learning to Rank. *Li, Y.*, +, *JBHI Oct. 2020 2787-2797*

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Fully Dense UNet for 2-D Sparse Photoacoustic Tomography Artifact Removal. *Guan, S.*, +, *JBHI Feb. 2020 568-576*

GoogLeNet-Based Ensemble FCNet Classifier for Focal Liver Lesion Diagnosis. *Balagourouchetty, L.*, +, *JBHI June 2020 1686-1694*

GP-CNN-DTEL: Global-Part CNN Model With Data-Transformed Ensemble Learning for Skin Lesion Classification. *Tang, P.*, +, *JBHI Oct. 2020 2870-2882*

Hierarchical Class Incremental Learning of Anatomical Structures in Fetal Echocardiography Videos. *Patra, A.*, +, *JBHI April 2020 1046-1058*

Hierarchical Rough-to-Fine Model for Infant Age Prediction Based on Cortical Features. *Hu, D.*, +, *JBHI Jan. 2020 214-225*

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Joint Prediction of Breast Cancer Histological Grade and Ki-67 Expression Level Based on DCE-MRI and DWI Radiomics. *Fan, M.*, +, *JBHI June 2020 1632-1642*

Knowledge-Based Analysis for Mortality Prediction From CT Images. *Guo, H.*, +, *JBHI Feb. 2020 457-464*

Label Co-Occurrence Learning With Graph Convolutional Networks for Multi-Label Chest X-Ray Image Classification. *Chen, B.*, +, *JBHI Aug. 2020 2292-2302*

Learning Brain Effective Connectivity Network Structure Using Ant Colony Optimization Combining With Voxel Activation Information. *Liu, J.*, +, *JBHI July 2020 2028-2040*

Learning to Quantify Emphysema Extent: What Labels Do We Need?. *Orting, S.N.*, +, *JBHI April 2020 1149-1159*

Lesion Location Attention Guided Network for Multi-Label Thoracic Disease Classification in Chest X-Rays. *Chen, B.*, +, *JBHI July 2020 2016-2027*

Localizing B-Lines in Lung Ultrasonography by Weakly Supervised Deep Learning, *In-Vivo* Results. *van Sloun, R.J.G.*, +, *JBHI April 2020 957-964*

Low-Memory CNNs Enabling Real-Time Ultrasound Segmentation Towards Mobile Deployment. *Vaze, S.*, +, *JBHI April 2020 1059-1069*

Measuring Saccade Latency Using Smartphone Cameras. *Lai, H.*, +, *JBHI March 2020 885-897*

MediMLP: Using Grad-CAM to Extract Crucial Variables for Lung Cancer Postoperative Complication Prediction. *He, T.*, +, *JBHI June 2020 1762-1771*

Mitochondria Segmentation From EM Images via Hierarchical Structured Contextual Forest. *Peng, J.*, +, *JBHI Aug. 2020 2251-2259*

Mitral Annulus Segmentation Using Deep Learning in 3-D Transesophageal Echocardiography. *Andreassen, B.S.*, +, *JBHI April 2020 994-1003*

Motion During Acquisition is Associated With fMRI Brain Entropy. *de Vries, C.F.*, +, *JBHI Feb. 2020 586-593*

MR-Forest: A Deep Decision Framework for False Positive Reduction in Pulmonary Nodule Detection. *Zhu, H.*, +, *JBHI June 2020 1652-1663*

MRLN: Multi-Task Relational Learning Network for MRI Vertebral Localization, Identification, and Segmentation. *Zhang, R.*, +, *JBHI Oct. 2020 2902-2911*

Multi-Level Multi-Modality Fusion Radiomics: Application to PET and CT Imaging for Prognostication of Head and Neck Cancer. *Lv, W.*, +, *JBHI Aug. 2020 2268-2277*

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Multi-Objective-Based Radiomic Feature Selection for Lesion Malignancy Classification. *Zhou, Z.*, +, *JBHI Jan. 2020 194-204*

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Multimodal Data Analysis of Alzheimer's Disease Based on Clustering Evolutionary Random Forest. *Bi, X.*, +, *JBHI Oct. 2020 2973-2983*

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Object Detection During Newborn Resuscitation Activities. *Meinich-Bache, O.*, +, *JBHI March 2020 796-803*

Objective Analysis of Neck Muscle Boundaries for Cervical Dystonia Using Ultrasound Imaging and Deep Learning. *Loram, I.*, +, *JBHI April 2020 1016-1027*

Practical Priors for Bayesian Inference of Latent Biomarkers. *Madan, H.*, +, *JBHI Feb. 2020 396-406*

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Progressive Transfer Learning and Adversarial Domain Adaptation for Cross-Domain Skin Disease Classification. *Gu, Y.*, +, *JBHI May 2020 1379-1393*

Pulmonary Textures Classification via a Multi-Scale Attention Network. *Xu, R.*, +, *JBHI July 2020 2041-2052*

Radiomics-Based Assessment of Primary Sjögren's Syndrome From Salivary Gland Ultrasonography Images. *Vukicevic, A.M.*, +, *JBHI March 2020 835-843*

Relative Afferent Pupillary Defect Screening Through Transfer Learning. *Temel, D.*, +, *JBHI March 2020 788-795*

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Classification of Cancer Pathology Reports: A Large-Scale Comparative Study. *Martina, S.*, +, *JBHI Nov. 2020 3085-3094*

EMR-Based Phenotyping of Ischemic Stroke Using Supervised Machine Learning and Text Mining Techniques. *Sung, S.*, +, *JBHI Oct. 2020 2922-2931*

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Adversarial Representation Learning for Robust Patient-Independent Epileptic Seizure Detection. *Zhang, X.*, +, *JBHI Oct. 2020 2852-2859*

AI in Medical Imaging Informatics: Current Challenges and Future Directions. *Panayides, A.S.*, +, *JBHI July 2020 1837-1857*

An Analysis of Eye-Tracking Features and Modelling Methods for Free-Viewed Standard Stimulus: Application for Schizophrenia Detection. *Kacur, J.*, +, *JBHI Nov. 2020 3055-3065*

An Efficient Deep Learning Based Method for Speech Assessment of Mandarin-Speaking Aphasic Patients. *Mahmoud, S.S.*, +, *JBHI Nov. 2020 3191-3202*

Artificial Neural Network for in-Bed Posture Classification Using Bed-Sheet Pressure Sensors. *Matar, G.*, +, *JBHI Jan. 2020 101-110*

Augmenting Dementia Cognitive Assessment With Instruction-Less Eye-Tracking Tests. *Mengoudi, K.*, +, *JBHI Nov. 2020 3066-3075*

Automatic and Explainable Labeling of Medical Event Logs With Autoencoding. *De Oliveira, H.*, +, *JBHI Nov. 2020 3076-3084*

Bi-Modality Medical Image Synthesis Using Semi-Supervised Sequential Generative Adversarial Networks. *Yang, X.*, +, *JBHI March 2020 855-865*

Bimodal Automated Carotid Ultrasound Segmentation Using Geometrically Constrained Deep Neural Networks. *Azzopardi, C.*, +, *JBHI April 2020 1004-1015*

Blind Monaural Source Separation on Heart and Lung Sounds Based on Periodic-Coded Deep Autoencoder. *Tsai, K.*, +, *JBHI Nov. 2020 3203-3214*

Blood Cell Classification Based on Hyperspectral Imaging With Modulated Gabor and CNN. *Huang, Q.*, +, *JBHI Jan. 2020 160-170*

Characterizing Alzheimer's Disease With Image and Genetic Biomarkers Using Supervised Topic Models. *Yang, J.*, +, *JBHI April 2020 1180-1187*

Classification of Exacerbation Frequency in the COPDGene Cohort Using Deep Learning With Deep Belief Networks. *Ying, J.*, +, *JBHI June 2020 1805-1813*

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Decoding Brain States From fMRI Signals by Using Unsupervised Domain Adaptation. *Gao, Y.*, +, *JBHI June 2020 1677-1685*

Deep Neural Networks for Survival Analysis Using Pseudo Values. *Zhao, L.*, +, *JBHI Nov. 2020 3308-3314*

DeepAVP: A Dual-Channel Deep Neural Network for Identifying Variable-Length Antiviral Peptides. *Li, J.*, +, *JBHI Oct. 2020 3012-3019*

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Detection and Monitoring of Thermal Lesions Induced by Microwave Ablation Using Ultrasound Imaging and Convolutional Neural Networks. *Zhang, S.*, +, *JBHI April 2020 965-973*

Electroencephalogram Spectral Moments for the Detection of Nocturnal Hypoglycemia. *Ngo, C.Q.*, +, *JBHI May 2020 1237-1245*

Evaluating and Enhancing the Generalization Performance of Machine Learning Models for Physical Activity Intensity Prediction From Raw Acceleration Data. *Farrahi, V.*, +, *JBHI Jan. 2020 27-38*

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Introducing the GEV Activation Function for Highly Unbalanced Data to Develop COVID-19 Diagnostic Models. *Bridge, J.*, +, *JBHI Oct. 2020 2776-2786*

Learning Deep Representations for Video-Based Intake Gesture Detection. *Rouast, P.V.*, +, *JBHI June 2020 1727-1737*

Models of Parkinson's Disease Patient Gait. *Hughes, J.A.*, +, *JBHI Nov. 2020 3103-3110*

Motor Imagery Classification via Temporal Attention Cues of Graph Embedded EEG Signals. *Zhang, D.*, +, *JBHI Sept. 2020 2570-2579*

Multi-Task Joint Learning Model for Segmenting and Classifying Tongue Images Using a Deep Neural Network. *Xu, Q.*, +, *JBHI Sept. 2020 2481-2489*

Multiple Vowels Repair Based on Pitch Extraction and Line Spectrum Pair Feature for Voice Disorder. *Zhang, T.*, +, *JBHI July 2020 1940-1951*

Objective Analysis of Neck Muscle Boundaries for Cervical Dystonia Using Ultrasound Imaging and Deep Learning. *Loram, I.*, +, *JBHI April 2020 1016-1027*

PlethAugment: GAN-Based PPG Augmentation for Medical Diagnosis in Low-Resource Settings. *Kiyasseh, D.*, +, *JBHI Nov. 2020 3226-3235*

PopPhy-CNN: A Phylogenetic Tree Embedded Architecture for Convolutional Neural Networks to Predict Host Phenotype From Metagenomic Data. *Reiman, D.*, +, *JBHI Oct. 2020 2993-3001*

Prediction of Reaction Time and Vigilance Variability From Spatio-Spectral Features of Resting-State EEG in a Long Sustained Attention Task. *Torkamani-Azar, M.*, +, *JBHI Sept. 2020 2550-2558*

Sequential Saliency Guided Deep Neural Network for Joint Mitosis Identification and Localization in Time-Lapse Phase Contrast Microscopy Images. *Lu, Y.*, +, *JBHI May 2020 1367-1378*

Using Deep Learning in Ultrasound Imaging of Bicipital Peritendinous Effusion to Grade Inflammation Severity. *Lin, B.*, +, *JBHI April 2020 1037-1045*

Neurophysiology

A Multi-Domain Connectome Convolutional Neural Network for Identifying Schizophrenia From EEG Connectivity Patterns. *Phang, C.*, +, *JBHI May 2020 1333-1343*

A Spectral Approach to Model-Based Noninvasive Intracranial Pressure Estimation. *Jaishankar, R.*, +, *JBHI Aug. 2020 2398-2406*

Accurate Deep Learning-Based Sleep Staging in a Clinical Population With Suspected Obstructive Sleep Apnea. *Korkalainen, H.*, +, *JBHI July 2020 2073-2081*

Adversarial Representation Learning for Robust Patient-Independent Epileptic Seizure Detection. *Zhang, X.*, +, *JBHI Oct. 2020 2852-2859*

Alzheimer's Disease Diagnosis and Severity Level Detection Based on Electroencephalography Modulation Spectral “Patch” Features. *Cassani, R.*, +, *JBHI July 2020 1982-1993*

An Analysis of Eye-Tracking Features and Modelling Methods for Free-Viewed Standard Stimulus: Application for Schizophrenia Detection. *Kacur, J.*, +, *JBHI Nov. 2020 3055-3065*

Assessment of Motor Impairments in Early Untreated Parkinson's Disease Patients: The Wearable Electronics Impact. *Ricci, M.*, +, *JBHI Jan. 2020 120-130*
Automated Morphological Measurements of Brain Structures and Identification of Optimal Surgical Intervention for Chiari I Malformation. *Mesin, L.*, +, *JBHI Nov. 2020 3144-3153*
Automatic Detection of Target Engagement in Transcutaneous Cervical Vagal Nerve Stimulation for Traumatic Stress Triggers. *Gurel, N.Z.*, +, *JBHI July 2020 1917-1925*
Canonical Correlation Analysis of Imaging Genetics Data Based on Statistical Independence and Structural Sparsity. *Zhang, Y.*, +, *JBHI Sept. 2020 2621-2629*
Characterizing Alzheimer's Disease With Image and Genetic Biomarkers Using Supervised Topic Models. *Yang, J.*, +, *JBHI April 2020 1180-1187*
Classifying Depression Severity in Recovery From Major Depressive Disorder via Dynamic Facial Features. *Harati, S.*, +, *JBHI March 2020 815-824*
Coherent Pattern in Multi-Layer Brain Networks: Application to Epilepsy Identification. *Huang, J.*, +, *JBHI Sept. 2020 2609-2620*
Constrained Tensor Decomposition for Longitudinal Analysis of Diffusion Imaging Data. *Stamile, C.*, +, *JBHI April 2020 1137-1148*
Contribution of Augmented Reality to Minimally Invasive Computer-Assisted Cranial Base Surgery. *Hussain, R.*, +, *JBHI July 2020 2093-2106*
CRSIDLab: A Toolbox for Multivariate Autonomic Nervous System Analysis Using Cardiorespiratory Identification. *Da Silva, L.S.C.B.*, +, *JBHI March 2020 728-734*
Decoding Brain States From fMRI Signals by Using Unsupervised Domain Adaptation. *Gao, Y.*, +, *JBHI June 2020 1677-1685*
Deep Learning Classification of Neuro-Emotional Phase Domain Complexity Levels Induced by Affective Video Film Clips. *Aydin, S., JBHI June 2020 1695-1702*
Deep Learning for Fall Risk Assessment With Inertial Sensors: Utilizing Domain Knowledge in Spatio-Temporal Gait Parameters. *Tunca, C.*, +, *JBHI July 2020 1994-2005*
Detecting Parkinsonian Tremor From IMU Data Collected in-the-Wild Using Deep Multiple-Instance Learning. *Papadopoulos, A.*, +, *JBHI Sept. 2020 2559-2569*
Detection of Gait From Continuous Inertial Sensor Data Using Harmonic Frequencies. *Ullrich, M.*, +, *JBHI July 2020 1869-1878*
Direct Cup-to-Disc Ratio Estimation for Glaucoma Screening via Semi-Supervised Learning. *Zhao, R.*, +, *JBHI April 2020 1104-1113*
Epilepsy Seizure Prediction on EEG Using Common Spatial Pattern and Convolutional Neural Network. *Zhang, Y.*, +, *JBHI Feb. 2020 465-474*
Epileptic Seizure Classification With Symmetric and Hybrid Bilinear Models. *Liu, T.*, +, *JBHI Oct. 2020 2844-2851*
Facial Weakness Analysis and Quantification of Static Images. *Zhuang, Y.*, +, *JBHI Aug. 2020 2260-2267*
Finger Joint Angle Estimation Based on Motoneuron Discharge Activities. *Dai, C.*, +, *JBHI March 2020 760-767*
Hierarchical Rough-to-Fine Model for Infant Age Prediction Based on Cortical Features. *Hu, D.*, +, *JBHI Jan. 2020 214-225*
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Learning Brain Effective Connectivity Network Structure Using Ant Colony Optimization Combining With Voxel Activation Information. *Liu, J.*, +, *JBHI July 2020 2028-2040*
Learning Hemodynamic Effect of Transcranial Infrared Laser Stimulation Using Longitudinal Data Analysis. *Wu, Q.*, +, *JBHI June 2020 1772-1779*
Motion During Acquisition is Associated With fMRI Brain Entropy. *de Vries, C.F.*, +, *JBHI Feb. 2020 586-593*
Motion Sensor-Based Assessment of Parkinson's Disease Motor Symptoms During Leg Agility Tests: Results From Levodopa Challenge. *Aghanavesi, S.*, +, *JBHI Jan. 2020 111-119*
MRLN: Multi-Task Relational Learning Network for MRI Vertebral Localization, Identification, and Segmentation. *Zhang, R.*, +, *JBHI Oct. 2020 2902-2911*
Multilevel Features for Sensor-Based Assessment of Motor Fluctuation in Parkinson's Disease Subjects. *Ghoraani, B.*, +, *JBHI May 2020 1284-1295*
Multimodal Data Analysis of Alzheimer's Disease Based on Clustering Evolutionary Random Forest. *Bi, X.*, +, *JBHI Oct. 2020 2973-2983*
Multimodal Sparse Classifier for Adolescent Brain Age Prediction. *Kassani, P.H.*, +, *JBHI Feb. 2020 336-344*
Multiple Axial Spine Indices Estimation via Dense Enhancing Network With Cross-Space Distance-Preserving Regularization. *Lin, L.*, +, *JBHI Nov. 2020 3248-3257*
Objective ADHD Diagnosis Using Convolutional Neural Networks Over Daily-Life Activity Records. *Amado-Caballero, P.*, +, *JBHI Sept. 2020 2690-2700*
Objective Analysis of Neck Muscle Boundaries for Cervical Dystonia Using Ultrasound Imaging and Deep Learning. *Loram, I.*, +, *JBHI April 2020 1016-1027*
Patient-Specific Seizure Detection Using Nonlinear Dynamics and Nullclines. *Zabihi, M.*, +, *JBHI Feb. 2020 543-555*
Practical Priors for Bayesian Inference of Latent Biomarkers. *Madan, H.*, +, *JBHI Feb. 2020 396-406*
Predicting Neonatal Sepsis Using Features of Heart Rate Variability, Respiratory Characteristics, and ECG-Derived Estimates of Infant Motion. *Joshi, R.*, +, *JBHI March 2020 681-692*
Prediction of Reaction Time and Vigilance Variability From Spatio-Spectral Features of Resting-State EEG in a Long Sustained Attention Task. *Torkamani-Azar, M.*, +, *JBHI Sept. 2020 2550-2558*
QuPWM: Feature Extraction Method for Epileptic Spike Classification. *Chahid, A.*, +, *JBHI Oct. 2020 2814-2824*
Sequential Pattern Mining of Longitudinal Adverse Events After Left Ventricular Assist Device Implant. *Movahedi, F.*, +, *JBHI Aug. 2020 2347-2358*
Shared Latent Structures Between Imaging Features and Biomarkers in Early Stages of Alzheimer's Disease: A Predictive Study. *Casamitjana, A.*, +, *JBHI Feb. 2020 365-376*
Single Volume Image Generator and Deep Learning-Based ASD Classification. *Ahmed, M.R.*, +, *JBHI Nov. 2020 3044-3054*
Spatially Regularized Shape Analysis of the Hippocampus Using*P*-Spline Based Shape Regression. *Achterberg, H.C.*, +, *JBHI March 2020 825-834*
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Toward a Better Estimation of Functional Brain Network for Mild Cognitive Impairment Identification: A Transfer Learning View. *Li, W.*, +, *JBHI April 2020 1160-1168*

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Patient diagnosis
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A Hybrid Global-Local Representation CNN Model for Automatic Cataract Grading. *Xu, X.*, +, *JBHI Feb. 2020 556-567*

A Novel MKL Method for GBM Prognosis Prediction by Integrating Histopathological Image and Multi-Omics Data. *Zhang, Y.*, +, *JBHI Jan. 2020 171-179*

A Resampling Based Grid Search Method to Improve Reliability and Robustness of Mixture-Item Response Theory Models of Multimorbid High-Risk Patients. *Batten, A.J.*, +, *JBHI June 2020 1780-1787*

An Early Disc Herniation Identification System for Advancement in the Standard Medical Screening Procedure Based on Bayes Theorem. *Sustersic, T.*, +, *JBHI Jan. 2020 151-159*

An Efficient Deep Learning Based Method for Speech Assessment of Mandarin-Speaking Aphasic Patients. *Mahmoud, S.S.*, +, *JBHI Nov. 2020 3191-3202*

Assessment of Motor Impairments in Early Untreated Parkinson's Disease Patients: The Wearable Electronics Impact. *Ricci, M.*, +, *JBHI Jan. 2020 120-130*

Bayesian Inference of Lymph Node Ratio Estimation and Survival Prognosis for Breast Cancer Patients. *Teng, J.*, +, *JBHI Feb. 2020 354-364*

Blind Equalization of Lung Crackle Sounds to Compensate Chest Attenuation. *Speranza, C.G.*, +, *JBHI June 2020 1796-1804*

Blockchain-Enabled Contextual Online Learning Under Local Differential Privacy for Coronary Heart Disease Diagnosis in Mobile Edge Computing. *Liu, X.*, +, *JBHI Aug. 2020 2177-2188*

Control-Oriented Model With Intra-Patient Variations for an Artificial Pancreas. *Moscoso-Vasquez, M.*, +, *JBHI Sept. 2020 2681-2689*

Convolutional Recurrent Neural Networks for Glucose Prediction. *Li, K.*, +, *JBHI Feb. 2020 603-613*

Deep Learning for Smartphone-Based Malaria Parasite Detection in Thick Blood Smears. *Yang, F.*, +, *JBHI May 2020 1427-1438*

Detecting Suspected Pump Thrombosis in Left Ventricular Assist Devices via Acoustic Analysis. *Semiz, B.*, +, *JBHI July 2020 1899-1906*

EMR-Based Phenotyping of Ischemic Stroke Using Supervised Machine Learning and Text Mining Techniques. *Sung, S.*, +, *JBHI Oct. 2020 2922-2931*

Knowledge Graph-Enabled Cancer Data Analytics. *Hasan, S.*, +, *JBHI July 2020 1952-1967*

Length-of-Stay Prediction for Pediatric Patients With Respiratory Diseases Using Decision Tree Methods. *Ma, F.*, +, *JBHI Sept. 2020 2651-2662*

LncRNA-Disease Associations Prediction Using Bipartite Local Model With Nearest Profile-Based Association Inferring. *Cui, Z.*, +, *JBHI May 2020 1519-1527*

Long Short-Term Memory Recurrent Neural Networks for Multiple Diseases Risk Prediction by Leveraging Longitudinal Medical Records. *Wang, T.*, +, *JBHI Aug. 2020 2337-2346*

Machine Listening for Heart Status Monitoring: Introducing and Benchmarking HSS—The Heart Sounds Shenzhen Corpus. *Dong, F.*, +, *JBHI July 2020 2082-2092*

MediMLP: Using Grad-CAM to Extract Crucial Variables for Lung Cancer Postoperative Complication Prediction. *He, T.*, +, *JBHI June 2020 1762-1771*

Multilevel Features for Sensor-Based Assessment of Motor Fluctuation in Parkinson's Disease Subjects. *Ghoraani, B.*, +, *JBHI May 2020 1284-1295*

Natural Language Processing for Mimicking Clinical Trial Recruitment in Critical Care: A Semi-Automated Simulation Based on the LeoPARDS Trial. *Tissot, H.C.*, +, *JBHI Oct. 2020 2950-2959*

Objective ADHD Diagnosis Using Convolutional Neural Networks Over Daily-Life Activity Records. *Amado-Caballero, P.*, +, *JBHI Sept. 2020 2690-2700*

On Edge Computing for Remote Pathology Consultations and Computations. *Sacco, A.*, +, *JBHI Sept. 2020 2523-2534*

PlethAugment: GAN-Based PPG Augmentation for Medical Diagnosis in Low-Resource Settings. *Kiyasseh, D.*, +, *JBHI Nov. 2020 3226-3235*

Predicting Human lncRNA-Disease Associations Based on Geometric Matrix Completion. *Lu, C.*, +, *JBHI Aug. 2020 2420-2429*

Screening For Depression With Retrospectively Harvested Private Versus Public Text. *Tlachac, M.*, +, *JBHI Nov. 2020 3326-3332*

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Using a Multi-Task Recurrent Neural Network With Attention Mechanisms to Predict Hospital Mortality of Patients. *Yu, R.*, +, *JBHI Feb. 2020 486-492*

Patient monitoring

A Deep Neural Network Application for Improved Prediction of HbA_{1c} in Type 1 Diabetes. *Zaitcev, A.*, +, *JBHI Oct. 2020 2932-2941*

A Feasible Feature Extraction Method for Atrial Fibrillation Detection From BCG. *Wen, X.*, +, *JBHI April 2020 1093-1103*

A Globalized Model for Mapping Wearable Seismocardiogram Signals to Whole-Body Ballistocardiogram Signals Based on Deep Learning. *Hersek, S.*, +, *JBHI May 2020 1296-1309*

A Machine Learning Approach to Classifying Self-Reported Health Status in a Cohort of Patients With Heart Disease Using Activity Tracker Data. *Meng, Y.*, +, *JBHI March 2020 878-884*

A Multimodal Wearable System for Continuous and Real-Time Breathing Pattern Monitoring During Daily Activity. *Qi, W.*, +, *JBHI Aug. 2020 2199-2207*

A Spectral Approach to Model-Based Noninvasive Intracranial Pressure Estimation. *Jaishankar, R.*, +, *JBHI Aug. 2020 2398-2406*

A Supervised Approach to Robust Photoplethysmography Quality Assessment. *Pereira, T.*, +, *JBHI March 2020 649-657*

Artificial Neural Network for in-Bed Posture Classification Using Bed-Sheet Pressure Sensors. *Matar, G.*, +, *JBHI Jan. 2020 101-110*

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Automatic Detection of Target Engagement in Transcutaneous Cervical Vagal Nerve Stimulation for Traumatic Stress Triggers. *Gurel, N.Z.*, +, *JBHI July 2020 1917-1925*

Automatic Detection of Ventilations During Mechanical Cardiopulmonary Resuscitation. *Jaureguibeitia, X.*, +, *JBHI Sept. 2020 2580-2588*

Ballistocardiography Can Estimate Beat-to-Beat Heart Rate Accurately at Night in Patients After Vascular Intervention. *Hoog Antink, C.*, +, *JBHI Aug. 2020 2230-2237*

Convolutional Recurrent Neural Networks for Glucose Prediction. *Li, K.*, +, *JBHI Feb. 2020 603-613*

Deep Interpretable Early Warning System for the Detection of Clinical Deterioration. *Shamout, F.E.*, +, *JBHI Feb. 2020 437-446*

Delineation of Electrocardiograms Using Multiscale Parameter Estimation. *Spicher, N.*, +, *JBHI Aug. 2020 2216-2229*

Design and Usability Assessment of a Multi-Device SOA-Based Telecare Framework for the Elderly. *Macis, S.*, +, *JBHI Jan. 2020 268-279*

Detecting Atrial Fibrillation and Atrial Flutter in Daily Life Using Photoplethysmography Data. *Eerikainen, L.M.*, +, *JBHI June 2020 1610-1618*

Detecting Suspected Pump Thrombosis in Left Ventricular Assist Devices via Acoustic Analysis. *Semiz, B.*, +, *JBHI July 2020 1899-1906*

Early and Late Fusion Machine Learning on Multi-Frequency Electrical Impedance Data to Improve Radiofrequency Ablation Monitoring. *Besler, E.*, +, *JBHI Aug. 2020 2359-2367*

Electrodermal Activity Based Pre-surgery Stress Detection Using a Wrist Wearable. *S., A.A.*, +, *JBHI Jan. 2020 92-100*

Electroencephalogram Spectral Moments for the Detection of Nocturnal Hypoglycemia. *Ngo, C.Q.*, +, *JBHI May 2020 1237-1245*

Estimation of Stride Time Variability in Unobtrusive Long-Term Monitoring Using Inertial Measurement Sensors. *Lueken, M.*, +, *JBHI July 2020 1879-1886*

Feasibility of Fingertip Oscillometric Blood Pressure Measurement: Model-Based Analysis and Experimental Validation. *Liu, J.*, +, *JBHI Feb. 2020 533-542*

FrailSafe: An ICT Platform for Unobtrusive Sensing of Multi-Domain Frailty for Personalized Interventions. *Zacharaki, E.I.*, +, *JBHI June 2020 1557-1568*

GluNet: A Deep Learning Framework for Accurate Glucose Forecasting. *Li, K.*, +, *JBHI Feb. 2020 414-423*

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Highly Accurate Bathroom Activity Recognition Using Infrared Proximity Sensors. *Chapron, K.*, +, *JBHI Aug. 2020 2368-2377*
Inferring Micro-Activities Using Wearable Sensing for ADL Recognition of Home-Care Patients. *Sridharan, M.*, +, *JBHI March 2020 747-759*
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Modeling Consistent Dynamics of Cardiogenic Vibrations in Low-Dimensional Subspace. *Zia, J.*, +, *JBHI July 2020 1887-1898*
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Multi-Sensor Fusion Approach for Cuff-Less Blood Pressure Measurement. *Miao, F.*, +, *JBHI Jan. 2020 79-91*
Non-Contact Sleep Stage Detection Using Canonical Correlation Analysis of Respiratory Sound. *Xue, B.*, +, *JBHI Feb. 2020 614-625*
Noninvasive Cardiac Output and Central Systolic Pressure From Cuff-Pressure and Pulse Wave Velocity. *Bikia, V.*, +, *JBHI July 2020 1968-1981*
Objective ADHD Diagnosis Using Convolutional Neural Networks Over Daily-Life Activity Records. *Amado-Caballero, P.*, +, *JBHI Sept. 2020 2690-2700*
Pattern Recognition Reveals Characteristic Postprandial Glucose Changes: Non-Individualized Meal Detection in Diabetes Mellitus Type 1. *Kolle, K.*, +, *JBHI Feb. 2020 594-602*
Portable Detection of Apnea and Hypopnea Events Using Bio-Impedance of the Chest and Deep Learning. *Van Steenkiste, T.*, +, *JBHI Sept. 2020 2589-2598*
Predicting Neonatal Sepsis Using Features of Heart Rate Variability, Respiratory Characteristics, and ECG-Derived Estimates of Infant Motion. *Joshi, R.*, +, *JBHI March 2020 681-692*
Predicting Quality of Overnight Glycaemic Control in Type 1 Diabetes Using Binary Classifiers. *Guemes, A.*, +, *JBHI May 2020 1439-1446*
Robust Heart Rate Monitoring for Quasi-Periodic Motions by Wrist-Type PPG Signals. *He, W.*, +, *JBHI March 2020 636-648*
Robust Interbeat Interval and Heart Rate Variability Estimation Method From Various Morphological Features Using Wearable Sensors. *Aygun, A.*, +, *JBHI Aug. 2020 2238-2250*
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Towards Wearable and Flexible Sensors and Circuits Integration for Stress Monitoring. *Chen, C.*, +, *JBHI Aug. 2020 2208-2215*
TSE-CNN: A Two-Stage End-to-End CNN for Human Activity Recognition. *Huang, J.*, +, *JBHI Jan. 2020 292-299*

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Real-Time Detection of Compensatory Patterns in Patients With Stroke to Reduce Compensation During Robotic Rehabilitation Therapy. *Cai, S.*, +, *JBHI Sept. 2020 2630-2638*

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A Method to Detect Presence of Chest Compressions During Resuscitation Using Transthoracic Impedance. *Coult, J.*, +, *JBHI March 2020 768-774*
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Activity Recognition From Newborn Resuscitation Videos. *Meinich-Bache, O.*, +, *JBHI Nov. 2020 3258-3267*
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Automatic Detection of Ventilations During Mechanical Cardiopulmonary Resuscitation. *Jaureguibeitia, X.*, +, *JBHI Sept. 2020 2580-2588*
Classifying Depression Severity in Recovery From Major Depressive Disorder via Dynamic Facial Features. *Harati, S.*, +, *JBHI March 2020 815-824*
Control-Oriented Model With Intra-Patient Variations for an Artificial Pancreas. *Moscoso-Vasquez, M.*, +, *JBHI Sept. 2020 2681-2689*
Cryptotanshinone Induces Cell Death in Lung Cancer by Targeting Aberrant Feedback Loops. *Vundavilli, H.*, +, *JBHI Aug. 2020 2430-2438*
Detecting Suspected Pump Thrombosis in Left Ventricular Assist Devices via Acoustic Analysis. *Semiz, B.*, +, *JBHI July 2020 1899-1906*
Detection and Control of Unannounced Exercise in the Artificial Pancreas Without Additional Physiological Signals. *Ramkissoon, C.M.*, +, *JBHI Jan. 2020 259-267*
Electroencephalogram Spectral Moments for the Detection of Nocturnal Hypoglycemia. *Ngo, C.Q.*, +, *JBHI May 2020 1237-1245*
Intelligent Data-Driven Model for Diabetes Diurnal Patterns Analysis. *Eissa, M.R.*, +, *JBHI Oct. 2020 2984-2992*
Joint Audio-Ultrasound Food Recognition for Noisy Environments. *Lee, K., JBHI May 2020 1477-1489*
Knowledge Graph-Enabled Cancer Data Analytics. *Hasan, S.*, +, *JBHI July 2020 1952-1967*
Length-of-Stay Prediction for Pediatric Patients With Respiratory Diseases Using Decision Tree Methods. *Ma, F.*, +, *JBHI Sept. 2020 2651-2662*
LncRNA-Disease Associations Prediction Using Bipartite Local Model With Nearest Profile-Based Association Inferring. *Cui, Z.*, +, *JBHI May 2020 1519-1527*
Medical Treatment Migration Prediction Based on GCN via Medical Insurance Data. *Ren, Y.*, +, *JBHI Sept. 2020 2516-2522*
Motion Sensor-Based Assessment of Parkinson's Disease Motor Symptoms During Leg Agility Tests: Results From Levodopa Challenge. *Aghanavesi, S.*, +, *JBHI Jan. 2020 111-119*
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Natural Language Processing for Mimicking Clinical Trial Recruitment in Critical Care: A Semi-Automated Simulation Based on the LeoPARDS Trial. *Tissot, H.C.*, +, *JBHI Oct. 2020 2950-2959*
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Predicting Human lncRNA-Disease Associations Based on Geometric Matrix Completion. *Lu, C.*, +, *JBHI Aug. 2020 2420-2429*
Predicting Quality of Overnight Glycaemic Control in Type 1 Diabetes Using Binary Classifiers. *Guemes, A.*, +, *JBHI May 2020 1439-1446*
Q-Rank: Reinforcement Learning for Recommending Algorithms to Predict Drug Sensitivity to Cancer Therapy. *Daoud, S.*, +, *JBHI Nov. 2020 3154-3161*
Quantifying the Impact of Resuscitation-Team Activation in Hospital Emergency Departments. *Xian, X.*, +, *JBHI Oct. 2020 3029-3037*

Real-Time Detection of Compensatory Patterns in Patients With Stroke to Reduce Compensation During Robotic Rehabilitation Therapy. *Cai, S.*, +, *JBHI Sept. 2020 2630-2638*
Sequential Pattern Mining of Longitudinal Adverse Events After Left Ventricular Assist Device Implant. *Movahedi, F.*, +, *JBHI Aug. 2020 2347-2358*
Short Keynote Paper: Mainstreaming Personalized Healthcare–Transforming Healthcare Through New Era of Artificial Intelligence. *Paranjape, K.*, +, *JBHI July 2020 1860-1863*
Studying the Effects of Systemic Inflammatory Markers and Drugs on AVF Longevity through a Novel Clinical Intelligent Framework. *Nakhaei, A.*, +, *JBHI Nov. 2020 3295-3307*
Team Collaboration Networks and Multidisciplinarity in Diabetes Care: Implications for Patient Outcomes. *Saint-Pierre, C.*, +, *JBHI Jan. 2020 319-329*
Technical Validation of an Automated Mobile Gait Analysis System for Hereditary Spastic Paraplegia Patients. *Martindale, C.F.*, +, *JBHI May 2020 1490-1499*

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A Machine Learning Approach to Classifying Self-Reported Health Status in a Cohort of Patients With Heart Disease Using Activity Tracker Data. *Meng, Y.*, +, *JBHI March 2020 878-884*
A Multi-Domain Connectome Convolutional Neural Network for Identifying Schizophrenia From EEG Connectivity Patterns. *Phang, C.*, +, *JBHI May 2020 1333-1343*
A Multi-View Deep Neural Network Model for Chemical-Disease Relation Extraction From Imbalanced Datasets. *Mitra, S.*, +, *JBHI Nov. 2020 3315-3325*
A Multimodal Wearable System for Continuous and Real-Time Breathing Pattern Monitoring During Daily Activity. *Qi, W.*, +, *JBHI Aug. 2020 2199-2207*
A Precision Environment-Wide Association Study of Hypertension via Supervised Cadre Models. *New, A.*, +, *JBHI March 2020 916-925*
Adaptive Feature Selection Guided Deep Forest for COVID-19 Classification With Chest CT. *Sun, L.*, +, *JBHI Oct. 2020 2798-2805*
Analysis of Medical Data Using Community Detection on Inferred Networks. *Kramer, J.*, +, *JBHI Nov. 2020 3136-3143*
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Classification of Cancer Pathology Reports: A Large-Scale Comparative Study. *Martina, S.*, +, *JBHI Nov. 2020 3085-3094*
Classification of Exacerbation Frequency in the COPDGene Cohort Using Deep Learning With Deep Belief Networks. *Ying, J.*, +, *JBHI June 2020 1805-1813*
Coherent Pattern in Multi-Layer Brain Networks: Application to Epilepsy Identification. *Huang, J.*, +, *JBHI Sept. 2020 2609-2620*
Constructing a Personalized Cross-Day EEG-Based Emotion-Classification Model Using Transfer Learning. *Lin, Y., JBHI May 2020 1255-1264*
Deep Learning for Fall Risk Assessment With Inertial Sensors: Utilizing Domain Knowledge in Spatio-Temporal Gait Parameters. *Tunca, C.*, +, *JBHI July 2020 1994-2005*
Deep Sentiment Classification and Topic Discovery on Novel Coronavirus or COVID-19 Online Discussions: NLP Using LSTM Recurrent Neural Network Approach. *Jelodar, H.*, +, *JBHI Oct. 2020 2733-2742*
DNA-SeAl: Sensitivity Levels to Optimize the Performance of Privacy-Preserving DNA Alignment. *Fernandes, M.*, +, *JBHI March 2020 907-915*
Efficient and Effective Training of COVID-19 Classification Networks With Self-Supervised Dual-Track Learning to Rank. *Li, Y.*, +, *JBHI Oct. 2020 2787-2797*
Electrodermal Activity Based Pre-surgery Stress Detection Using a Wrist Wearable. *S., A.A.*, +, *JBHI Jan. 2020 92-100*
EMR-Based Phenotyping of Ischemic Stroke Using Supervised Machine Learning and Text Mining Techniques. *Sung, S.*, +, *JBHI Oct. 2020 2922-2931*
Evaluating and Enhancing the Generalization Performance of Machine Learning Models for Physical Activity Intensity Prediction From Raw Acceleration Data. *Farrahi, V.*, +, *JBHI Jan. 2020 27-38*
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Leveraging Semantics in WordNet to Facilitate the Computer-Assisted Coding of ICD-11. *Chen, D.*, +, *JBHI May 2020 1469-1476*
Measuring and Localizing Individual Bites Using a Sensor Augmented Plate During Unrestricted Eating for the Aging Population. *Mertes, G.*, +, *JBHI May 2020 1509-1518*
MediMLP: Using Grad-CAM to Extract Crucial Variables for Lung Cancer Postoperative Complication Prediction. *He, T.*, +, *JBHI June 2020 1762-1771*
Multi-Objective-Based Radiomic Feature Selection for Lesion Malignancy Classification. *Zhou, Z.*, +, *JBHI Jan. 2020 194-204*
Multilevel Features for Sensor-Based Assessment of Motor Fluctuation in Parkinson's Disease Subjects. *Ghoraani, B.*, +, *JBHI May 2020 1284-1295*
Multimodal Data Analysis of Alzheimer's Disease Based on Clustering Evolutionary Random Forest. *Bi, X.*, +, *JBHI Oct. 2020 2973-2983*
Natural Language Generation Model for Mammography Reports Simulation. *Hoogi, A.*, +, *JBHI Sept. 2020 2711-2717*
Pathway-Based Single-Cell RNA-Seq Classification, Clustering, and Construction of Gene-Gene Interactions Networks Using Random Forests. *Wang, H.*, +, *JBHI June 2020 1814-1822*
PopPhy-CNN: A Phylogenetic Tree Embedded Architecture for Convolutional Neural Networks to Predict Host Phenotype From Metagenomic Data. *Reiman, D.*, +, *JBHI Oct. 2020 2993-3001*
Predicting Hospital Readmission: A Joint Ensemble-Learning Model. *Yu, K.*, +, *JBHI Feb. 2020 447-456*
QuPWM: Feature Extraction Method for Epileptic Spike Classification. *Chahid, A.*, +, *JBHI Oct. 2020 2814-2824*
Real-Time Detection of Compensatory Patterns in Patients With Stroke to Reduce Compensation During Robotic Rehabilitation Therapy. *Cai, S.*, +, *JBHI Sept. 2020 2630-2638*
Toward a Wearable System for Predicting Freezing of Gait in People Affected by Parkinson's Disease. *Demrozi, F.*, +, *JBHI Sept. 2020 2444-2451*

Pattern clustering

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A Precision Environment-Wide Association Study of Hypertension via Supervised Cadre Models. *New, A.*, +, *JBHI March 2020 916-925*
Analysis of Medical Data Using Community Detection on Inferred Networks. *Kramer, J.*, +, *JBHI Nov. 2020 3136-3143*
Automatic and Explainable Labeling of Medical Event Logs With Autoencoding. *De Oliveira, H.*, +, *JBHI Nov. 2020 3076-3084*
Automatic Scale Severity Assessment Method in Psoriasis Skin Images Using Local Descriptors. *George, Y.*, +, *JBHI Feb. 2020 577-585*
Intelligent Data-Driven Model for Diabetes Diurnal Patterns Analysis. *Eissa, M.R.*, +, *JBHI Oct. 2020 2984-2992*
Multimodal Data Analysis of Alzheimer's Disease Based on Clustering Evolutionary Random Forest. *Bi, X.*, +, *JBHI Oct. 2020 2973-2983*
Pathway-Based Single-Cell RNA-Seq Classification, Clustering, and Construction of Gene-Gene Interactions Networks Using Random Forests. *Wang, H.*, +, *JBHI June 2020 1814-1822*
Predicting Human lncRNA-Disease Associations Based on Geometric Matrix Completion. *Lu, C.*, +, *JBHI Aug. 2020 2420-2429*
Seasonal Local Models for Glucose Prediction in Type 1 Diabetes. *Montaser, E.*, +, *JBHI July 2020 2064-2072*

Pattern recognition

Pattern Recognition Reveals Characteristic Postprandial Glucose Changes: Non-Individualized Meal Detection in Diabetes Mellitus Type 1. *Kolle, K.*, +, *JBHI Feb. 2020 594-602*

Pediatrics

A Spectral Approach to Model-Based Noninvasive Intracranial Pressure Estimation. *Jaishankar, R.*, +, *JBHI Aug. 2020 2398-2406*

Activity Recognition From Newborn Resuscitation Videos. *Meinich-Bache, O.*, +, *JBHI Nov. 2020 3258-3267*
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Inference on Long-Range Temporal Correlations in Human EEG Data. *Smith, R.J.*, +, *JBHI April 2020 1070-1079*
Length-of-Stay Prediction for Pediatric Patients With Respiratory Diseases Using Decision Tree Methods. *Ma, F.*, +, *JBHI Sept. 2020 2651-2662*
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Pattern Recognition Reveals Characteristic Postprandial Glucose Changes: Non-Individualized Meal Detection in Diabetes Mellitus Type 1. *Kolle, K.*, +, *JBHI Feb. 2020 594-602*
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Phantoms
Localizing B-Lines in Lung Ultrasonography by Weakly Supervised Deep Learning, *In-Vivo* Results. *van Sloun, R.J.G.*, +, *JBHI April 2020 957-964*

Phonocardiography
Heart Sound Segmentation Using Bidirectional LSTMs With Attention. *Fernando, T.*, +, *JBHI June 2020 1601-1609*
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Data-Driven Identification of Stochastic Model Parameters and State Variables: Application to the Study of Cardiac Beat-to-Beat Variability. *Sampedro-Puente, D.A.*, +, *JBHI March 2020 693-704*
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A Multimodal Wearable System for Continuous and Real-Time Breathing Pattern Monitoring During Daily Activity. *Qi, W.*, +, *JBHI Aug. 2020 2199-2207*
Automatic Detection of Target Engagement in Transcutaneous Cervical Vagal Nerve Stimulation for Traumatic Stress Triggers. *Gurel, N.Z.*, +, *JBHI July 2020 1917-1925*
Automatic Detection of Ventilations During Mechanical Cardiopulmonary Resuscitation. *Jaureguibeitia, X.*, +, *JBHI Sept. 2020 2580-2588*
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CRSIDLab: A Toolbox for Multivariate Autonomic Nervous System Analysis Using Cardiorespiratory Identification. *Da Silva, L.S.C.B.*, +, *JBHI March 2020 728-734*
Deep Learning on Computerized Analysis of Chronic Obstructive Pulmonary Disease. *Altan, G.*, +, *JBHI May 2020 1344-1350*
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Non-Contact Sleep Stage Detection Using Canonical Correlation Analysis of Respiratory Sound. *Xue, B.*, +, *JBHI Feb. 2020 614-625*
Portable Detection of Apnea and Hypopnea Events Using Bio-Impedance of the Chest and Deep Learning. *Van Steenkiste, T.*, +, *JBHI Sept. 2020 2589-2598*
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Positron emission tomography
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Constructing a Personalized Cross-Day EEG-Based Emotion-Classification Model Using Transfer Learning. *Lin, Y., JBHI May 2020 1255-1264*
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Integrative Hypergraph Regularization Principal Component Analysis for Sample Clustering and Co-Expression Genes Network Analysis on Multi-Omics Data. *Wu, M.*, +, *JBHI June 2020 1823-1834*
Studying the Manifold Structure of Alzheimer's Disease: A Deep Learning Approach Using Convolutional Autoencoders. *Martinez-Murcia, F.J.*, +, *JBHI Jan. 2020 17-26*
Privacy
A Privacy-Preserving Mobile and Fog Computing Framework to Trace and Prevent COVID-19 Community Transmission. *Whaiduzzaman, M.*, +, *JBHI Dec. 2020 3564-3575*
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A DNA-Based Intelligent Expert System for Personalised Skin-Health Recommendations. *Liu, X.*, +, *JBHI Nov. 2020 3276-3284*
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Retina

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Automatic Segmentation and Visualization of Choroid in OCT with Knowledge Infused Deep Learning. *Zhang, H.*, +, *JBHI Dec. 2020 3408-3420*

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Spatially Aware Dense-LinkNet Based Regression Improves Fluorescent Cell Detection in Adaptive Optics Ophthalmic Images. *Liu, J.*, +, *JBHI Dec. 2020 3520-3528*
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ELEMENT: Multi-Modal Retinal Vessel Segmentation Based on a Coupled Region Growing and Machine Learning Approach. *Rodrigues, E.O.*, +, *JBHI Dec. 2020 3507-3519*
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Retinopathy
Machine Learning Techniques for Ophthalmic Data Processing: A Review. *Sarhan, M.H.*, +, *JBHI Dec. 2020 3338-3350*
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Dynamic Off-Body Rician Channel Modeling for Indoor Wireless Body Area Networks. *Dautov, R.*, +, *JBHI May 2020 1246-1254*

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Computational Identification of RNA-Seq Based miRNA-Mediated Prognostic Modules in Cancer. *Pan, C.*, +, *JBHI Feb. 2020 626-633*
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Robust Interbeat Interval and Heart Rate Variability Estimation Method From Various Morphological Features Using Wearable Sensors. *Aygun, A.*, +, *JBHI Aug. 2020 2238-2250*

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A Residual Based Attention Model for EEG Based Sleep Staging. *Qu, W.*, +, *JBHI Oct. 2020 2833-2843*
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Deep Learning Classification of Neuro-Emotional Phase Domain Complexity Levels Induced by Affective Video Film Clips. *Aydin, S., JBHI June 2020 1695-1702*
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Deep Sentiment Classification and Topic Discovery on Novel Coronavirus or COVID-19 Online Discussions: NLP Using LSTM Recurrent Neural Network Approach. *Jelodar, H.*, +, *JBHI Oct. 2020 2733-2742*

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Viruses (medical)
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