

# 2020 Index

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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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A Data-Driven Study of DDoS Attacks and Their Dynamics. *Wang, A., +, TDSC May-June 2020 648-661*

A Logical Key Hierarchy Based Approach to Preserve Content Privacy in Decentralized Online Social Networks. *De Salve, A., +, TDSC Jan.-Feb. 2020 2-21*

Anonymity Services Tor, I2P, JonDonym: Classifying in the Dark (Web). *Montieri, A., +, TDSC May-June 2020 662-675*

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Cloud Centric Authentication for Wearable Healthcare Monitoring System. *Srinivas, J., +, TDSC Sept.-Oct. 2020 942-956*

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Lightweight Sharable and Traceable Secure Mobile Health System. *Yang, Y., +, TDSC Jan.-Feb. 2020 78-91*

Privacy-Aware and Efficient Mobile Crowdsensing with Truth Discovery. *Zheng, Y., +, TDSC Jan.-Feb. 2020 121-133*

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Providing Task Allocation and Secure Deduplication for Mobile Crowdsensing via Fog Computing. *Ni, J., +, TDSC May-June 2020 581-594*

senDroid: Auditing Sensor Access in Android System-Wide. *Han, W., +, TDSC March-April 2020 407-421*

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