Proceedings

2020 13th International Congress on Image and Signal Processing, BioMedical Engineering and Informatics

CISP-BMEI 2020

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Preface

CISP-BMEI 2020

Welcome to the 2020 13th International Congress on Image and Signal Processing, BioMedical Engineering and Informatics (CISP-BMEI 2020)!

CISP-BMEI 2020 is a premier international forum for scientists and researchers to present the state-of-the-art of multimedia, signal processing, biomedical engineering and informatics and to discuss future research challenges. The conference provides us with a good opportunity for communication and discussion.

On behalf of the organizing committee, we would like to thank all those who contributed professionally to ensuring the high standards of the technical program, including the authors, technical program committee members, peer reviewers, and session chairs. The conference received many submissions around the world, and all papers were rigorously reviewed by many technical program committee members and peer reviewers who devoted tremendous amount of time and effort on the evaluations. We are grateful for the dedication and efforts from the Organizing Committee. Special thanks go to keynote speakers, Metin Akay, Yuanting Zhang, and Yasemin M. Akay. We greatly appreciate the technical co-sponsorship from the IEEE Engineering in Medicine and Biology Society (EMBS). The conference is especially honored by the presence of the EMBS President-Elect, Professor Metin Akay.

The conference was originally planned to be held in Yantai by Yantai University and was later moved online due to the pandemic. Yantai University faces the Yellow Sea on the east and the green mountains on the west. With its beautiful scenery and pleasant climate, Yantai University is closer to the ocean than any other national university in China, and it also has the longest coastline.Yantai Universitywas established in July 1984. With the approval of the Ministry of Education, Peking and Tsinghua Universities jointly sent elite teachers specialized in teaching, research and management to assist in its long-term plan of development. Yantai University has placed great emphasis oncurriculum development and research and has made great progress in achieving quality education. Withthe ideal of integrating the sciences, engineering, and the humanities, Yantai University has consistently strived to improve its educational standardsin order to ensure the continuous development of

its teaching quality. We sincerely hope there will be an opportunity for us to meet in person in Yantai University.

CISP-BMEI 2020 Organizing Committee
October, 2020

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CISP-BMEI 2020

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Video Processing

Video Motion Analysis and Tracking

Video Content-Based Retrieval

Artificial Intelligence and Computer Vision in Video

Video Processing Applications

Other Topics in Video Processing

Image Processing

Image Coding and Transmission

Image Restoration and Enhancement

Image Feature Extraction

Image Segmentation

Graphics and Animation

Image Content-Based Retrieval

Computer Vision and Artificial Intelligence in Images

Imaging
Remote Sensing

Forensics, Watermarking, and Security

Multimedia Processing for Communications
Image Processing Applications

Other Topics in Image Processing

Signal Processing

Signal Representation and Transforms

Statistical Signal Processing

Filter Design

Signal Coding and Transmission

Adaptive Signal Processing

Time-Frequency Signal Analysis

Speech and Language Processing

Signal Modeling, Identification and Prediction

Acoustics

Sensor Array and Multi-Channel Systems

Signal Processing for Communications

Signal Processing Applications

Other Topics in Signal Processing

BioMedical Engineering

Biomedical Imaging

Biomedical Image Processing

Biomedical Signal Processing and Analysis

Biomedical Modeling, Simulations, and Visualization

Artificial Intelligence and Machine Learning in BioMedical Engineering

Biomedical Instrumentation, Materials, Tissue Engineering, Artificial Organs, and Nano Technologies

Healthcare Information Systems
Other Topics in Bioinformatics, Systems Biology, and Medical Informatics

Informatics: Fundamental Technologies Important to Medicine and Biology

Automation, Robotics, and Control

Data Mining and Database Systems

Computer Security and Privacy

Software Engineering

Distributed Systems, Computer Architecture and Hardware
Computer Applications
Computer Communications and Networking

Artificial Intelligence and Machine Learning

Other Topics in Informatics

other

other