

IEEE Bi+CAS 2022 TAIPEI

Biomedical Circuits and Systems Conference

Intelligent Biomedical Systems for a Better Future

October 13-15, 2022 | TAIPEI, TAIWAN

Chang Yung-Fa Foundation, International Convention Center (CYFF)



BioCAS 2022 is a premier international forum for presenting the interdisciplinary research and development activities at the crossroads of medicine, life sciences, physical sciences and engineering that shape tomorrow's medical devices and healthcare systems. This conference brings together members of our communities to broaden their knowledge in emerging areas of research at the interface of the life sciences and the circuits and systems engineering. The three-day single-track program for BioCAS 2022 is multidisciplinary in topics including but not limited to:

Biomedical Technologies

- Biosensor Devices and Interface Circuits
- Body Area/Sensor Network and Wireless Health Monitoring
- Implantable and Wearable Health Devices and system
- Bio-Inspired and Neuromorphic Circuits and Systems
- Electronics for Neuroscience
- Innovative Circuits for Medical Applications
- Biofeedback, Neuromodulation, and Closed-Loop Systems
- Assistive, Rehabilitation, and Quality of Life Technologies
- Biotelemetry and Energy Harvesting/Scavenging Circuits and Systems
- Lab-on-Chip / BioMEMS / Point-of-Care Devices

Biomedical Applications

- Artificial Intelligence of Things (AIoT) for Healthcare
- Biomedical Imaging and Image Processing
- Bio-signal Recording, Processing, and Machine Learning
- Genomics and Systems Biology
- Human-Machine Interfaces
- Medical Information Systems and Bioinformatics

SUBMISSION GUIDELINES

Prospective authors are invited to submit full length papers (in standard IEEE double-column format) in a **maximum of 5 pages**, of which 4 are for technical content including text, figures, and references (if any), and with one **additional optional 5th page containing only references**. Papers must be submitted electronically in PDF format through <https://2022.ieee-biocas.org/>

GRAND CHALLENGE ON RESPIRATORY SOUND CLASSIFICATION

IEEE CASS is organizing the next Grand Challenge on Respiratory Lung Sound Classification at IEEE BioCAS 2022. Auscultation has been essential part of the physical examination. Lung sound characteristics provide important information in the diagnosis of respiratory diseases. The aim of Grand Challenge is to develop an automated adventitious lung sound detection method to reduce the workload of physicians. Participants shall express their interest to participate in this Grand Challenge by sending an email to the organizer Yongfu Li (Yongfu.li@sjtu.edu.cn) and are invited to submit their work as BioCAS papers selecting the special session "Lung Sound Design Contest". The papers will be regularly reviewed and, if accepted, must be presented at BioCAS 2022.

Please check the latest update on the following website https://yongfu-li.github.io/biocas_contest_2022/contest.html



<https://2022.ieee-biocas.org/>

IMPORTANT DATES

Special Session Proposal Deadline:
Friday, April 15 29, 2022

Regular Paper Submission Deadline:
Friday, June 10 24, 2022

Live Demo Submission Deadline:
Friday, July 15, 2022

Author Notification Date:
Friday, August 12, 2022

Author Registration/Final Paper Submission Deadline:
Monday, August 29, 2022

BioCAS 2022 Student Travel Grants Application Deadline:
Wednesday, September 7, 2022

Conference Registration:
Monday, October 3, 2022

ORGANIZERS

General Co-Chairs

Kea-Tiong (Samuel) Tang
National Tsing Hua University, Taiwan

Shuenn-Yuh Lee
National Cheng Kung University, Taiwan

Technical Program Co-Chairs

Tsung-Hsien Lin
National Taiwan University, Taiwan

Danilo Demarchi
Politecnico di Torino, Italy

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University of Alberta, Canada

