

ARTIFICIAL INTELLIGENCE BIOMEDICAL CIRCUITS AND SYSTEMS FOR HEALTH



BioCAS 2023 is a premier international forum for presenting 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 life sciences and circuits and systems engineering. The three-day single-track program of BioCAS 2023 is multidisciplinary with topics including but not limited to:

BIOMEDICAL TECHNOLOGIES

- » Biosensor Devices and Interface Circuits
- » Body Area/Sensor Networks and Wireless Health Monitoring
- » Implantable and Wearable Health Devices and systems
- » 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

EMERGING TECHNOLOGIES

- » COVID-19 diagnosis
- » Flexible devices and circuits for biomedical applications
- » Brain-computer interface

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 an optional 5th page containing only references. Papers must be submitted electronically in PDF format through 2023.ieee-biocas.org

IMPORTANT DATES

Friday, April 14, 2023

Special Session Proposal Deadline

Friday, June 9, 2023

Regular Paper Submission Deadline

Friday, July 14, 2023

Live Demo Submission Deadline

Friday, August 11, 2023

Author Notification Date

Friday, August 24, 2023

BioCAS 2023 Student Travel Grants
Application Deadline

Friday, September 1, 2023

Author Registration/Final Paper
Submission Deadline

Friday, October 6, 2023

Conference Registration

ORGANIZERS

General Co-Chairs

Yong Lian

York University, Canada

Xiao-Ping Zhang

Toronto Metropolitan University

Danilo Demarchi

Politecnico di Torino, Italy

Technical Program Co-Chairs

Jie Chen

University of Alberta, Canada

Tsung-Hsien Lin

National Taiwan University, Taiwan

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