IEEE
BiOCAS 2023 Toronto
Biomedical Circuits and Systems Conference
October 19-21, 2023 | Toronto, Canada

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

» Artficial 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 21, 2023
Special Session Proposal Deadline

~~Friday June 9, 2023~~
Extended to June 23, 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

Xuanyao Fong
National University of Singapore, Singapore