



IEEE BHI-BSN 2022

IEEE-EMBS INTERNATIONAL CONFERENCE ON BIOMEDICAL AND HEALTH INFORMATICS (BHI'22)
JOINTLY ORGANISED WITH THE IEEE-EMBS INTERNATIONAL CONFERENCE ON WEARABLE
AND IMPLANTABLE BODY SENSOR NETWORKS (BSN'22)

Ioannina, Greece | September 27-30, 2022

CALL FOR PAPERS

IEEE-EMBS INTERNATIONAL CONFERENCE ON WEARABLE AND IMPLANTABLE BODY SENSOR NETWORKS (BSN'22)

IMPORTANT DATES

April 30, 2022

Special Sessions & Workshop
Proposals Submission Deadline

May 15, 2022

Special Sessions & Workshop
Proposals Acceptance Notification

May 30, 2022

Initial Regular Full-Length Paper
Submission Deadline

June 15, 2022

Special Session Paper Submission
Deadline

July 15, 2022

Full-Length & Special Session
Acceptance Notification

July 25, 2022

Initial 1-Page Extended Abstract
Submission Deadline

August 5, 2022

1-Page Extended Abstract
Acceptance Notification

August 15, 2022

Camera-Ready Paper and 1-Page
Extended Abstract Submission Deadline

ORGANIZERS

Conference Co-Chairs

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The 18th IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN 2022) is sponsored by IEEE-EMBS to address the challenges in the emerging sensor medical/healthcare systems and networks. BSN 2022 will be co-organized with the BHI 2022 (IEEE International Conference on Biomedical and Health Informatics). The joint program (BHI-BSN) will have world-renowned speakers from academic and research institutes, government agencies, and industry.

Body sensor networks provide innovative ways to improve treatment outcomes and patients' comfort. They offer novel ways to measure physiology, behavior observations from users. Leveraging innovative systems, communication modules, on-chip and off-line data processing and modeling, these measurements are turned into actionable information. Closed-loop BSN with therapeutic systems and interventional functions are becoming a reality.

Authors are invited to submit full papers (4 Pages) and demo/poster abstracts (1 Page) presenting cutting-edge research related to the theory and/or practice of wearable, ingestible and implantable sensors and systems in the healthcare/medical domains. Selected papers will be invited to submit to a special series that will be published in the IEEE Open Journal of Engineering in Medicine and Biology <https://www.embs.org/ojemb/>.

All submissions must describe original research that is not published or currently under review elsewhere. Full papers being accepted will be indexed in ISI Web of Science, Scopus, IEEE Xplorer, and Google Scholar. Areas of interest include, but are not limited to:

- » Prototyping of body-worn, ingestible and implantable sensor networks
- » Novel chemical, biological and textile body sensors
- » Flexible and/or stretchable electronic sensors and systems
- » Ultra-low-power or battery-less solutions for longitudinal studies
- » Machine learning, deep learning and decision support algorithms
- » Body area communication protocols, models and theories
- » Security, privacy and trust in body sensor network
- » Medical/wellness applications from pre-natal health to elderly care.

This year, BSN will recognize multiple awards from all accepted papers, including Best Paper Award, Best Student Paper Award, Best Poster Award, and Best Demo Award.

BSN 2022 will provide dedicated networking social events and special topic workshops to encourage BSN 2022 participants to exchange knowledge and insights, and to foster new collaborations.

Please visit bhi-bsn-2022.org for more details.

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Conference Co-Chairs

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The IEEE-EMBS International Conference on Biomedical and Health Informatics (BHI) and the IEEE-EMBS International Conference on Wearable and Implantable Body Sensor Networks (BSN) are sponsored by the IEEE Engineering in Medicine and Biology Society (IEEE-EMBS). This joint conference is focused on informatics and computing in healthcare and life sciences.

The conference will take place in Ioannina Greece, from 27-30 September, 2022. It will provide a unique forum to showcase enabling technologies of devices and sensors, hardware and software systems, predictive models, databases, and big data analytics and machine learning that optimize the acquisition, transmission, processing, monitoring, storage, retrieval, analysis, visualization and interpretation of vast volumes of multi-modal biomedical data, as well as related social, behavior, environmental, and geographical data.

It will also demonstrate the deployment of BHI solutions that integrate key technologies including machine learning, artificial intelligence, Internet of Things (IoT), mHealth, eHealth, human computer interface, telemedicine, bioinformatics, sensors, imaging, and public health monitoring, to achieve patient-centric and outcome-driven effective health care. BHI 2022 has the following tracks:

- » Biomedical Big Data and AI (Deep Learning and Shallow ML)
- » Clinical Informatics
- » Public Health Informatics
- » Translational Bioinformatics
- » Imaging Informatics
- » Biomedical Signal Processing and Sensor Informatics
- » Behavioral Informatics
- » Mental Health Informatics
- » Rehabilitation Informatics
- » Disease Oriented Informatics
- » Cognitive AI
- » Intelligent Mixed and Extended Reality
- » Digital Health and Digital Twin
- » Precision Systems Medicine
- » Biomedical Data Harmonization and FHIR
- » Causal Inference and Explainable AI
- » Biomedical Data Quality Control and Integration
- » Reinforcement Learning and Real-Time Decision Making
- » Federated and Swarm Learning
- » Edge Computing
- » Biomedical Data Science and Engineering Education
- » Multiscale Modeling

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