MeitY, Govt. of India

2024 International Conference on

BRAIN-COMPUTER INTERFACE AND HEALTH TECHNOLOGIES (iCon-BCIHT)

19-20 December 2024

Dimora, Thiruvananthapuram, Kerala, India

Organised by **CDAC, Govt. Medical College Thiruvananthapuram, SCTIMST Thiruvananthapuram IIST Thiruvananthapuram , IEEE EMBS Kerala chapter & IEEE Kerala Section**

: IEEE Xplore

https://iconbci.in

The Event

The 2024 International Conference on Brain-computer interface and health technologies(iCon-BCIHT) is organized by CDAC, Government Medical College Thiruvananthapuram, SCTIMST Thiruvananthapuram, IIST Thiruvananthapuram ,IEEE EMBS Kerala chapter and IEEE Kerala Section. This event will focus on the practical applications of cutting-edge theories and methodologies in healthcare, assistive technologies, space applications, and brain signal decoding. The conference aims to unite leading researchers from industry and academia to exchange ideas, present innovative techniques, and address current issues and future trends in BCI research and applications. The recent convergence of healthcare technologies, assistive technologies, space technologies, and BCI innovations offers transformative possibilities for healthcare and improving the lives of individuals with neurological conditions. This conference serves as a pivotal platform for exploring these advancements and their potential impact on healthcare and the lives of individuals.

CDAC

The Centre for Development of Advanced Computing (C-DAC) is the premier R&D organization under the Ministry of Electronics and Information Technology (MeitY), focusing on IT, electronics, and associated areas. Established in 1988 to build Supercomputers in response to import restrictions,C-DAC launched its first Supercomputer, PARAM, with 1 GFLOP. It also pioneered Indian Language Computing Solutions through its GIST group and merged with the National Centre for Software Technology (NCST) and the Electronic Research and Development Centre of India (ER&DCI), expanding its expertise in applied electronics and software technologies. Over time, C-DAC has grown to include areas such as Health Informatics and education and training initiatives, addressing the needs of the Indian industry. As a leader in IT and electronics R&D, C-DAC collaborates closely with MeitY to drive national technological advancements and respond to global developments, leveraging its expertise to innovate and deploy IT solutions across various sectors.

GMC, Thiruvananthapuram

The Government Medical College in Thiruvananthapuram (the capital of Kerala), India, founded in 1951. it was dedicated by Prime Minister Jawaharlal Nehru and is Kerala's oldest medical college. The college was known in early records as Medical College since it was the only medical institute in the state at its inception. It has ranked 21st in an India Today survey. The college has a good clinical record but has lagged in research. The college is one of 15 across India to be connected through the National Knowledge Commission's National Knowledge Network to integrate its knowledge base with the global scientific community

SCTIMST

Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST) is an Institution of National Importance under the Department of Science and Technology, Government of India. With a rich legacy spanning over four decades, SCTIMST integrates medicine and technology, offering advanced research and training facilities. The institute has three wings: a tertiary referral super specialty hospital, a biomedical technology wing, and the Achutha Menon Centre for Health Science Studies.It specializes in high-quality, advanced treatment of cardiac and neurological disorders and the development of indigenous biomedical technologies. SCTIMST provides cutting-edge treatments in interventional radiology, cardiac electrophysiology, deep brain stimulation, epilepsy surgery, pediatric cardiac surgery, and more. It also houses a Technical Research Centre for Biomedical devices and a medical devices incubator (TIMed), fostering innovation and training in medical specialties and public health research

IIST

Indian Institute of Space Science and Technology (IIST), situated at Thiruvananthapuram is a Deemed to be University under Section 3 of the UGC Act 1956. IIST functions as an autonomous body under the Department of Space, Government of India. The idea of such an institute was mooted keeping in mind the need for high quality manpower for the Indian Space Research Organization, one of world’s leading scientific organizations engaged in space research and space applications.

The institute is the first of its kind in the country, to offer high quality education at the undergraduate, graduate, doctoral and post-doctoral levels in areas with special focus to space sciences, space technology and space applications. IIST was formally inaugurated on 14 September 2007 by Dr. G. Madhavan Nair, the then Chairman, ISRO and was temporarily housed in the premises of Vikram Sarabhai Space Centre, very close from where ISRO built and launched its first rocket.

IEEE Kerala Section

The IEEE Kerala Section, formally initiated on February 17, 1975, is a prominent regional branch of the Institute of Electrical and Electronics Engineers (IEEE). It serves as a vital platform for professionals, researchers, and students in Kerala to collaborate, innovate, and advance in the fields of electrical, electronics, and computer engineering. The section is dedicated to fostering technological growth, professional development, and knowledge sharing through various events, conferences, and workshops.

IEEE EMBS Kerala Chapter

The IEEE Engineering in Medicine and Biology Society (EMBS) Kerala Chapter, established to promote the intersection of engineering and medical sciences, plays a pivotal role in advancing biomedical engineering in the region. The chapter organizes numerous activities, including workshops, seminars, and conferences, to facilitate knowledge exchange and collaboration among professionals, researchers, and students. By fostering innovation and supporting interdisciplinary research, the IEEE EMBS Kerala Chapter contributes significantly to the development of medical technologies and healthcare solutions, enhancing the quality of life in the community

Call for Papers

- Brain-Computer Interface in Clinical Practice
- Standardization in BCI Technologies
- Neuroimaging Techniques and Brain Mapping
- Rehabilitation and Assistive Technologies using BCI
- Neurofeedback and Mental Health Applications
- Artificial Intelligence for BCI Technologies
- Bigdata, AI & Data Analytics in Health Systems
- Signal Processing and Image Processing based Health Systems
- IOT in Health Systems
- Imaging system in Health Technology
- Computer visualisation and Simulation in Health care

Submission Guidelines

Authors are invited to submit papers through Microsoft's Conference Management Toolkit (CMT). All submitted papers will be peer-reviewed based on their quality and relevance. The authors are invited to submit full papers up to 6 pages. The Title of the paper and the Abstract are to be entered separately, along with the full paper. Accepted and presented papers of '2024 International Conference on Brain Computer Interface & Healthcare Technologies (iCon-BCIHT)' will be submitted for publication in the IEEE Xplore Digital Library. Once the authors receive the acceptance notification, log on to Microsoft CMT Website and upload the Camera ready paper, generate e-copyright form and then upload the e-copyright form. Authors also need to do the registration in the google form provided in the conference website.

Registration details

Category	Delegates From India		Foreign Delegates	
	IEEE Members (incl tax)	Non-IEEE Members (incl tax)	IEEE Members (incl tax)	Non-IEEE Members (incl tax)
UG/PG Students	INR 6000	INR 7000	USD 200	USD 250
Faculty/Research Scholar	INR 7000	INR 8000	USD 250	USD 300
Industry/Corporate	INR 8000	INR 9000	USD 300	USD 350
Co-Author/Attendee	INR 2000	INR 3000	USD 100	USD 100

* An additional INR 1000 will be charged for co-authors/attendees who opt for the Gala Dinner

Important dates

Calls for Papers : 6th June 2024

Extended
Paper Submission Deadline : 10th September 2024

Conference Dates : 19th & 20th December 2024

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