

INTERNATIONAL WORKSHOP ON INNOVATIONS AND TRENDS IN BRAIN COMPUTING TECHNIQUES

25 - 29 April 2022



Organized by
**Centre for Excellence
in Brain Computing**



**Kerala University of Digital Sciences,
Innovation and Technology**

Centre for Excellence in Brain Computing (CEBC), Kerala University of Digital Sciences, Innovation & Technology is organising a 5-day International workshop on Innovations & Trends in Brain Computing techniques. The programme aims to bring professionals, researchers, scientists, faculty members, students and experts together on a single platform to discuss innovative ideas on brain computing in multiple disciplines. Brain computing has emerged as a powerful learning mechanism for developing intelligent systems as it facilitates natural understanding for contemporary problems. Pattern Recognition, Machine Learning, Computational Intelligence, Visual Understanding, Natural Language Processing, Emotion Recognition, Speech Recognition, Metaverse etc. are upgrading with the essence of Natural Intelligence. The objective of the workshop is to equip participants to innovate brain computing techniques and its application in Computational Perspective.

Kerala University of Digital Sciences, Innovation and Technology

Kerala University of Digital Sciences, Innovation and Technology (Digital University of Kerala) was established in 2020 by the Government of Kerala by upgrading the Indian Institute of Information Technology and Management-Kerala (IIITM-K). It is a non-affiliating research and postgraduate teaching university in the state of Kerala to facilitate and promote studies, research, incubation and extension work in digital technologies and its application domains in science, engineering and humanities.

For more info: <https://duk.ac.in/>

Centre for Excellence in Brain Computing

The centre aims to contribute in brain science research and develop Intelligent Digital Systems by analysing the human brain activity through brain computer interfaces and state-of-the-art AI Technologies. CEBC conducts research, training and developments focusing more on Machine Learning, Image Processing, Pattern Recognition, Natural Language Processing etc. to solve real life problems. The recent work carried out in CEBC include the diagnosis of Neurodegenerative diseases, Algorithm and Connectome design, Saliency, Linguistics, Speech Recognition and many more. The centre is open for more collaboration and joint research in these areas.

Topics covered in the workshop

Explainable AI systems	Brain computing techniques	Biological intelligence	Cognition in Metaverse
Brain imaging technologies in BCI	Brain source Localization	Brain physiology and brain mapping	Challenges and opportunities of brain computing
Pattern recognition & analysis	Human attention-Neurological and psychological perspective	Neural correlation using eye tracking	Cognitive vigilance assessment and enhancement

Resource Persons

Dr. Jitendran Muthuswamy Arizona State University	Dr. C. Kesavadas SCTIMST, Trivandrum	Prof. Hasan Al Nashash American University of Sharjah	Prof. Achuthsankar S Nair University of Kerala
Prof. Tapan Gandhi IIT Delhi	Prof. Lalan Kumar IIT Delhi	Prof. Alex Pappachen James Digital University of Kerala	Dr. Arun Sasidharan NIMHANS
Dr. Gisi Shibu S P Fort Hospital	Dr. Sujesh Sreedharan SCTIMST, Trivandrum	Dr. Pragathi P. Balasubramani IIT Kanpur	Dr. Priyanka Srivastava University of Allahabad
Mr. Robin Tommy TCS R&I	Prof. Elizabeth Sherly Digital University of Kerala		

Who can Participate?

The programme is specially designed for Academicians, Researchers, Scientists, Students, Faculty members and Professionals from IT industry.

Important Dates

Last date of Registration: **20th April 2022**

Date of Commencement of Workshop: **25th April 2022**

Accommodation

*A limited number of seats are available for the participants @DUK hostel.

Workshop Fee

Student/Research Scholar : **Rs 3000+GST**

Faculty/Academician : **Rs 5000+GST**

Professional/Scientist : **Rs 7000+GST**

- **CSI/IEEE Members will get 20% discount on registration fee.**
- **To encourage women participation, 75% discount on registration fee is offered to the first 20 women research scholars who register**

Address for Communication

The Convenor, Cognizance'22
International workshop on Innovations
and Trends in Brain Computing Techniques

Centre for Excellence in Brain Computing
Kerala University of Digital Sciences,
Innovation and Technology

Technocity Campus, Mangalapuram
Thonnakkal P.O Thiruvananthapuram,
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Email: **cebc@duk.ac.in, www.duk.ac.in**

ICFOSS



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Formerly Indian Institute of Information Technology and Management- Kerala (IIITM-K)

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Strong industry-academia linkages (Maker Village,
Kerala Blockchain Academy, thingQbator, Graphene
Centre, Centre for Digital Innovation, Product
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campus with advanced lab facilities



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Artificial Intelligence
Cyber Security Engineering

MTech in ELECTRONICS ENGINEERING

Artificial Intelligence Hardware
Signal Processing and Automation
Artificial Intelligence Robotics
Computational Imaging

MTech in ELECTRONIC PRODUCT DESIGN (Flexible mode)

MSc in COMPUTER SCIENCE

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Cyber Security
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Geospatial Analytics

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Deadline for submission of
Applications for DUK Admissions:

1st May 2022

admission-pg@duk.ac.in



duk.ac.in/admissions2022/

DIGITAL UNIVERSITY KERALA