ABOUT DUK

Digital University Kerala (DUK), officially known as the Kerala University of Digital Sciences, Innovation and Technology, is India's first digital university. Located in Technocity, Mangalapuram, on the outskirts of Thiruvananthapuram, it was established in 2020 by upgrading the Indian Institute of Information Technology and Management - Kerala (IIITM-K). The university aims to drive digital transformation through research, innovation, and industry collaborations. It plays a key role in shaping Kerala as a global digital hub. DUK aims to become a global leader in digital education and research, nurturing talents capable of developing innovative and sustainable solutions for industry, government, and society. Its mission is to "Curate a Responsible Digital World," focusing on four key themes: Computing, Intelligence, Sustainability, and Entrepreneurship. The university comprises five schools: School of Computer Science and Engineering, School of Digital Sciences, School of Electronic Systems and Automation, School of Informatics, School of Digital Humanities and Liberal Arts

ABOUT SCHOOL

The School of Computer Science and Engineering (SoCSE) at DUK, focuses on cutting-edge research and education in computing technologies. It offers M.Tech/M.Sc/Ph.D programs in Artificial Intelligence and Cybersecurity to equip students with industry-relevant skills. SoCSE emphasizes interdisciplinary learning, hands-on projects, and collaborations with industry and academia. With state-of-the-art facilities and expert faculty, SoCSE aims to drive innovation in computing and digital transformation. It plays a crucial role in positioning DUK as a leader in advanced digital education and research. Through its academic and research initiatives, SoCSE aims to contribute to technological innovation and societal development.

FDP OBJECTIVES

- The objective of this FDP is to provide participants with indepth knowledge and hands-on experience in Cloud Computing and IoT-based healthcare systems.
- This FDP aims to cover real-world applications of Cloud-IoT integration in healthcare, enabling participants to explore advancements in smart hospitals, remote monitoring, data analytics, and Al-driven decision-making.
- This FDP will bridge the gap between academia and industry by providing insights into the latest research trends, challenges, and opportunities, future directions in the Cloud-IoT-based healthcare solutions.
- This FDP will provide the chance to explore real time case studies with the help of industry experts.

Chief Patron

Dr. Ciza Thomas, Vice Chancellor, Digital University Kerala

Patron

Dr.A. Mujeeb, Registrar, Digital University Kerala

FDP Co-ordinator

Dr.Balasubramaniam S Assistant Professor, School of Computer Science and Engineering, Digital University Kerala balasubramaniam.s@duk.ac.in

FDP Co-coordinator

Dr. Muthusankar Eswaran,
Assistant Professor,
School of Electronics Systems and Automation,
Digital University Kerala
muthusankar.eswaran@duk.ac.in

Organizing Team

Faculty Members, School of Computer Science and Engineering (SoCSE), Digital University Kerala

Targeted Participants

- Faculty Members, Research Scholars and PG Students from AICTE approved Institutions.
- Industry Persons and Practitioners working in the areas of Cloud and IoT based Healthcare Systems and Applications.
- Maximum 30% participants can be from Host Institution.

Registration and Guidelines

- Interested Participants are informed to do the registration on ATAL website, https://atalacademy.aicte.gov.in/login.
- ATAL FDPs are FREE, and no fee will be charged from any participants.
- Refreshments & Lunch would be provided free of cost.
- External Participants will also get a lump sum Travelling Allowance (TA) subject to travelling more than 20 Km one side and attending at least 90% of the sessions.
- Participants would be eligible to receive a certificate up on achieving at least 70% cumulative weightage in the assessment mentioned in ATAL scheme document 2025-2026.
- Minimum 80% Attendance is Essential.





AICTE Training and Learning (ATAL) Academy

Sponsored

Faculty Development Programme (FDP)

On

Next Generation Healthcare with Cloud Computing and IoT

30.06.2025 to 05.07.2025





Curating a responsible digital world

Organized by

School of Computer Science and Engineering,
Kerala University of Digital Sciences, Innovation and
Technology (Digital University Kerala),
Technopark Phase IV Campus, Mangalapuram,
Thiruvananthapuram, Kerala, India – 695317
https://duk.ac.in

FDP Contents

- · Introduction to Cloud Computing & IoT in Healthcare.
- · Cloud-IoT Architecture for Healthcare Applications.
- Internet of things use cases for the Healthcare industry.
- Mental Health Monitoring Using IoT Devices and Eye Trackers.
- Building Intelligent Healthcare Solutions using Google Cloud Platform (GCP).
- Security and Privacy Challenges in Cloud-IoT Healthcare Applications.
- Cloud-IoT based Telemedicine Solutions & EHR/EMR Systems.
- Emerging Trends and Future Directions in Cloud-IoT Healthcare Systems.
- Responsible AI in the age of LLMs for Healthcare Applications.
- · NEP 2020 Implementation.

FDP Outcomes

- Understanding of Cloud Computing and IoT fundamentals and their role in healthcare.
- Awareness of data security, privacy, and AI applications in healthcare systems.
- Insights into recent research and industrial trends in healthcare technology.
- Ability to integrate Cloud-IoT solutions into academic research and practical applications.
- During the Industrial visit, Participants will explore real-time industry solutions for the current problems.
- Will get the insights from latest research papers on Cloud-IoT based healthcare applications.

This FDP will empower participants with the skills and knowledge required to contribute effectively to research, development, and teaching in Cloud-IoT-based healthcare systems.

Resource Persons/ Eminent Speakers



Dr. M. BrindhaAssociate Professor
Department of Computer Science and Engineering
National Institute of Technology (NIT),
Tiruchirappalli, Tamilnadu

Dr. Muneeswaran PAssistant Professor
Department of Computer Science and Engineering
National Institute of Technology (NIT),
Calicut, Kerala



Dr.Pethuru RajVice President and Chief Architect
Edge Al Division,
Reliance Jio Platforms Ltd.
Bangalore, India

Dr. Deepak Mishra,Professor
Department of Avionics
IIST, Thiruvananthapuram



Er. Kumaresan M K
Senior Al Consultant
Google India
Bangalore, India

Mr. Senthil Kumar K BScientist-F/Associate Director
Cyber Security Group
C-DAC, Thiruvananthapuram





Mr. Binu Janardhanan Scientist-E/Joint Director Health Technology Group C-DAC, Thiruvananthapuram

Dr. B. Surendiran
Associate Professor
Department of Computer Science and
Engineering
National Institute of Technology (NIT),
Puducherry





Dr. Ebin Deni Raj
Assistant Professor
Department of Computer Science and
Engineering
Indian Institute of Information Technology
(IIIT), Kottayam, Kerala

Dr. K. Satheesh Kumar
Visiting Professor,
School of Digital Sciences,
Kerala University of Digital Sciences
Innovation and Technology,
Thiruvananthapuram, India

