Toc H
INSTITUTE OF SCIENCE & TECHNOLOGY
Arakkunnam P.O | Mulanthuruthy | Ernakulam | Kerala

TIST

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AICTE-VAANI Sponsored Three Day Workshop

on

SMART MANUFACTURING: UNLEASHING THE POWER OF INDUSTRY 4.0 WITH IoT ESSENTIALS

Emerging Field: Manufacturing & Industry 4.0

in

Malayalam

📅 10ᵗʰ - 12ᵗʰ July 2024

https://tistcochin.edu.in/aicte-vaani

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Organised by

**DEPARTMENT OF
COMPUTER SCIENCE & ENGINEERING**

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AICTE – VAANI

AICTE is committed to the development of quality technical education in the country by initiating various schemes launched by Govt. of India. AICTE-Vibrant Advocacy for Advancement and Nurturing of Indian Languages (VAANI) scheme promotes Indian languages among faculty members and students to improve the teaching-learning process. The AICTE-VAANI scheme will help in creating knowledge base in local language and will encourage creation of a treasure of latest technical knowledge incorporating the newest developments in regional languages. The scheme will also promote promotion of the research papers in the regional languages and further enhance the collaboration between Institutions and Industry.

About the Institution

Toc H Institute of Science and Technology established in 2002, is one of the much sought after professional institutions in Kerala, attracting extremely talented management & engineering students across the nation. The institute is approved by All India Council for Technical Education (AICTE), New Delhi and Government of Kerala, and is affiliated to APJ Abdul Kalam Technological University. The Institute is accredited by NAAC (National Assessment and Accreditation Council) with NBA (National Board of Accreditation) accredited programs (Civil Engineering, Computer Science & Engineering, Electronics & Communication Engineering, Mechanical Engineering and Safety & Fire Engineering) and ISO 9001:2015 Certification which ensure top-quality learning environment. The institute also offers B. Tech Programs in Robotics & Automation Engineering, Electrical & Computer Engineering, Electrical & Electronics Engineering and Information Technology, M. Tech Programs in Construction Engineering & Management, Data Science and Master of Business Administration.

About the Department

The Department of Computer Science and Engineering, since its inception in 2002, imparts quality education in the field of B.Tech Computer Science and Engineering, keeping in mind the requirements of the dynamic, innovative and highly global environment of the present era. The department also offers M.Tech in Data Science, since 2020, which is one of the most sought after courses globally. The Department has excellent infrastructure facilities with advanced computer laboratories, full-fledged smart classrooms and well-functioned library. The Department offers progressive teaching-learning environment through a team of competent and committed faculty members, experienced in both teaching and industry and are engaged in cutting-edge research areas like Artificial Intelligence, Internet of Things, Blockchain Technology etc.

About the Workshop

IoT plays a crucial role in driving the evolution of Manufacturing & Industry 4.0 by facilitating real-time data collection, analysis, and actionable insights to improve product quality. IoT fosters connectivity across the manufacturing ecosystem, bridging the gap between machines, systems, and humans. This interconnectedness empowers manufacturers to create smart factories that are agile, adaptive, and responsive to market dynamics. The integration of IoT in Manufacturing & Industry 4.0 also paves the way for predictive maintenance, enabling proactive identification and resolution of potential issues. This workshop will be ideal for academicians, researchers, and working professionals to create a strong knowledge base for improving the teaching-learning process of IoT in Industry 4.0 through the medium of Malayalam language.

Objective

This Three-Day Workshop organized in Malayalam Language aims to
- Equip participants with stronger skills and better understanding of IoT technologies and its effective integration in the domain of Manufacturing & Industry 4.0.
- Cater educators and professionals from diverse background with bi-linguistic knowledge based hands-on sessions in the realm of smart manufacturing & digital transformation in the 4th industrial revolution era.

Expected Outcome

The expected outcomes of this Workshop are:
- Cohort of well-informed and skilled faculty members and professionals with IoT knowledgebase can inspire and educate the next generation using local language in Manufacturing & Industry 4.0 domain.
- Participants may generate cognitive and creative transformation skills, exploring new possibilities and directions in making the best use of fully integrated smart manufacturing systems.
- Facilitate networking opportunities, fostering collaborations between educational institutions and industry partners making better social cohesion.

Resource Persons

- Dr. M V Judy, Professor, DCA, CUSAT, Kerala, India
- Dr. Shailesh Sivan, Assistant Professor, DCS, CUSAT, Kerala, India
- Ms. Shamna Parakkal, Data Scientist, Freston Analytics Pvt. Ltd., India, UK
- Mr. Sandeep Sreekumar, Co-founder & COO, IndustryApps Pvt. Ltd., India, Singapore
- Mr. Richard M Joy, Director & CEO, Teqard Labs Pvt. Ltd., India
- Mr. Prince John Joseph, Director & COO, Teqard Labs Pvt. Ltd., India
- Ms. Neethu A S, Assistant Professor, DCS, CUSAT, Kerala, India
- Mr. Gautham G Nair, Hardware Engineer, Teqard Labs Pvt. Ltd., India
- Mr. Jacob Jose, Assistant Professor, Toc H, Kerala, India

Eligibility & Selection Process

☞ This offline IoT Workshop is open to faculties, research fellows, PG students from AICTE approved institutions and working professionals from industry
☞ Participants will be selected on a first come first serve basis
☞ Limited to 50 seats
☞ **Last date for registration: 30 June 2024**
☞ Link for online registration: **https://bit.ly/aicte-vaani-toch2024**
☞ Free registration for participants

Organizing Committee

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Manager, Toc H Group of Institutions

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President, Toc H Group of Institutions

Mr. Madhu Cherian
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Scheduled Dates: 10-July-2024 to 12-July-2024

Day	Morning Session		Afternoon Session
10/07/24 Wednesday	**Session I** 9:30 am – 11:00 am **Dr. M V Judy** Professor, CUSAT *Topic: Demystifying the Convergence of IoT and Industry 4.0*	**Session II** 11:00 am – 12:30 pm **Dr. Shailesh Sivan** Asst. Professor, CUSAT *Topic: Integrating Web App Development in Smart Manufacturing* (Hands-on Session)	**Session III** 1:30 pm – 4:00 pm **Dr. Shailesh Sivan** **Ms. Neethu A S** Asst. Professor, CUSAT Research Scholar, CUSAT *Topic: Digital Transformation in Manufacturing: Android App Development Insights* (Hands-on Session)
11/07/24 Thursday	**Session IV** 9:00 am – 10:30 am **Mr. Gautham G Nair** Hardware Engineer, Teqard Labs Pvt. Ltd *Topic: Establishing an Optimal Research Environment for ArduinoIDE Development* (Hands-on Session)	**Session V** 10:30 am – 12:30 pm **Mr. Richard M Joy** Director & CEO, Teqard Labs Pvt. Ltd *Topic: IoT Sensor Integration and Data Acquisition Techniques* (Hands-on Session)	**Session VI** 1:30 pm – 4:00 pm **Mr. Prince John Joseph** Director & COO, Teqard Labs Pvt. Ltd *Topic: Development of IoT based Smart Agriculture Monitoring and Control System using Mobile App & Web App* (Hands-on Session)
12/07/24 Friday	**Session VII** 9:00 am – 11:00 am **Mr. Jacob Jose** Asst. Professor Toc H, *Topic: Exploring Tableau for Visualizing IoT Data* (Hands-on Session)	**Session VIII** 11:00 am – 12:30 pm **Ms. Shamna Parakkal** Data Engineer, Freston Analytics Pvt. Ltd. *Topic: Exploring Kibana for Visualizing IoT Data* (Hands-on Session)	**Session IX** 1:30 pm – 3:30 pm **Mr. Sandeep Sreekumar** Co-founder & COO, IndustryApps Pvt. Ltd. *Topic: Industry 4.0 Use Cases in Smart Manufacturing*