About Workshop

Smart healthcare system is the need of the modern world. The life in these days is full of stress and busyness. The cost of treatment is also increasing. We are witnessing tremendous growth in the field of hardware, software, intelligent systems. The IoT & AI/ML is redefining Healthcare by ensuring better care, improved treatment outcomes and reduced patient costs, as better processes and workflows, improved performance and patient experience for healthcare providers. Realizing the facts this workshop is designed to impart the detailed knowledge of IoT, ML & AI and their application in the field of healtcare systems.

- Entrepreneurs should be able to widely apply the IoT in the healthcare system to improve the medical facility for society.
- Integrating IoT with AI/ML in the healthcare system will enable in design & development of intelligent systems for assessment, monitoring, diagnosis, etc.
- Entrepreneurs and scholars can leverage IoT devices for remote monitoring and diagnosis of various health conditions. With IoT, they can collect valuable data from patients, such as vital signs, activity levels, medication adherence, and other health-related metrics. This data can then be used to improve the quality of care provided to patients and enable better analysis of health conditions.
- IoT devices can also help healthcare providers to identify potential health issues before they become critical, allowing for early intervention and preventive care. Furthermore, IoT-enabled remote monitoring can help to reduce hospital readmissions and healthcare costs by providing timely interventions and reducing the need for in-person visits.
- With the help of advanced analytics techniques such as AI/ML, this collected data can also be used for reasearch purpose, further analyzed and processed to gain valuable insights into the health of patients, identify trends, and improve care delivery.

Workshop Objective

- Understanding IoT in Healthcare.
- Application of IoT in Healthcare by Entrepreneurs.
- Integration of IoT with AI/ML for Healthcare.
- Healthcare Remote Monitoring and Data Utilization.
- Healthcare Advanced Analytics and Preventive Care.

Topics to be Covered

- Introduction to Smart Healthcare Systems and IoT.
- Smart Healthcare Data Analysis.
- Smart Healthcare Systems and Machine Learning.
- Ethics of AI/ML in Smart Healthcare.
- Integration of IoT and Machine Learning in Healthcare.

Resource Persons

Eminent experts from Industry and Academia (IITs, NITs, IIITs, etc.) will be delivering talks along with few hands on session.

Participants

Targeted participants are Entrepreneurs, Graduates, Post Graduates, who are looking for high end entrepreneurship in sunrise sector. The workshop is also open for Faculty members of academic institutions and working professional, scientists/researchers from MSME and Industries.

Other Important Information for Participants:

- The workshop will be conducted in physical mode.
- Seats are limited and the participants will be selected based on first come first serve. However, the preferance should be given to the participants from the category of SC, ST, OBC, Women, PH and Minority.
- Shared accommodation and food for participants will be provided by NIT Sikkim.
- NIT Sikkim, Ravangla is situated at an altitute of 2100 meter the weather remains cold throughout the year. So, it is requested to participants to carry the warm cloths along with them.
- TA will be reimbursed to the participants as per the shortest railway/road routes (2AC/3AC) or equivalent fair upon submission on original tickets.
- Selected candidates will have to acknowledge participating in the workshop through return email failing which the waitlisted candidates may be called for attending the workshop.
- The candidate must upload No Objection Certificate (NOC) from Supervisor/ Head of the Department/ Head of the Institute in the registration link for participating in the workshop.

One Week Advanced Entrepreneurship Skill Development **Programme** and (A-ESDP) on Smart Healthcare Systems using IoT and AI/ML Funded by Ministry of MSME, **Government of India** 27th february to 02nd March 2024 Organised by Department of Computer Science & Ingineering National Institute of Technology Sikkim Ravangla - 737139

Aboout NIT Sikkim

The National Institute of Technology, Sikkim commenced its educational journey in August 2010. Campus is situated in nestled within the picturesque landscapes of Ravangla, in the South Sikkim Sub-Division. The Ravangla campus is enveloped by stunning natural beauty and serves as the institute's current home, where it is expected to remain until its permanent campus, situated in Khamdong, Sikkim, is established.

The institute operates with nine distinct departments, offering a comprehensive range of educational programs, including four-year Bachelor of Technology (B.Tech.) programs in various engineering disciplines, as well as two-year Master of Technology (M.Tech.), M.Sc., and Ph.D. programs. Admissions to the undergraduate programs are granted through the JEE (Main) examination, while entrance to the postgraduate courses, including the M.Tech. program, is determined by the performance in the Graduate Aptitude Test in Engineering (GATE).



About Department of Computer Science & Engineering

The Department of Computer Science and Engineering (CSE) at National Institute of Technology Sikkim has been functioning since the inception of the Institute in the year 2010. The Department provides an outstanding teaching environment complemented by excellence in research.

The Department offers four years B. Tech degree, two years M. Tech degree and Ph. D in Computer Science and Engineering. The Department has a comprehensive curriculum on topics related to all aspects of Computer Science with special emphasis on applicability that is provided using latest techniques of engineering. Please visit https://cse.nitsikkim.ac.in to know more about the department of CSE.

Registration

Registration is free for all participants. The workshop is completely sponsored by Ministry of Micro, Small & Medium Enterprise (MSME), Government of India.

To complete online registration, the participants need to fill the following google form before 12th February 2024:

https://forms.gle/nKurNE8yvvFL8bjZ7



Venue

Department of Computer Science & Engineering

National Institute of Technology Sikkim, Ravangla-737139

Contact and Queries: Please send your queries directly to the

Dr. Md. Sarfaraj Alam Ansari (Coordinator).

email: sarfaraj@nitsikkim.ac.in, Ph.: (+91) - 9332342995

Patron

Prof. Mahesh Chandra Govil
Director, NIT Sikkim

Coordinators

Dr. Md. Sarfaraj Alam Ansari

Assistant Professor
Department of CSE, NIT Sikkim

Dr. Hemant Kumar Kathania

Assistant Professor
Department of ECE, NIT Sikkim

Dr. Pratyay Kuila

Associate Professor, Dean R&C, HoD CSE Department, Nodal Officer A-ESDP, NIT Sikkim

Convenors

Dr. Sangram Ray

Associate Professor Department of CSE, NIT Sikkim

Dr. Pankaj Kumar Keserwani

Assistant Professor Department of CSE, NIT Sikkim

Advisory Committee

Dr. Krishna Kumar

Assistant Professor Department of CSE, NIT Sikkim

Dr. Bam Bahadur Sinha

Assistant Professor
Department of CSE, NIT Sikkim