



ICANTCI-2024

1st International Conference on Advanced Network Technologies and Computational Intelligence

Organized by

Department of Computer Applications, Chitkara University, Punjab, India in association with City University, Malaysia and University of Wollongong in Dubai, UAE

on

April 5-6, 2024

******* CALL FOR SPECIAL SESSION *******

SPECIAL SESSION ON

Incubation of Artificial Intelligence and IoT for Healthcare

SESSION ORGANIZERS:

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SESSION DESCRIPTION:

Rapid developments in hardware, software, and communication technologies have facilitated the emergence of Internet-connected sensory devices that provide observations and data measurements from the physical world. The technology of Internet-connected devices, referred to as the Internet of Things (IoT), continues to extend the current Internet by providing connectivity and interactions between the physical and cyber worlds. IoT is undoubtedly transforming the healthcare industry by redefining the space of devices and people's interaction in delivering healthcare solutions. IoT has applications in healthcare that benefit patients, families, physicians, hospitals and insurance companies. Internet of Things (IoT)-enabled devices has made remote monitoring in the healthcare sector possible, unleashing the potential to keep patients safe and healthy, and empowering physicians to deliver superlative care. It has also increased patient engagement and satisfaction as interactions with doctors have become easier and more efficient. Furthermore, remote monitoring of patient's health helps in reducing the length of hospital stay and

prevents re-admissions. IoT also has a major impact on reducing healthcare costs significantly and improving treatment outcomes.

In addition to an increased volume, the IoT generates big data characterized by its velocity in terms of time and location dependency, with a variety of multiple modalities and varying data quality. Intelligent processing and analysis of this big data are the keys to developing smart IoT applications thereby making space for machine learning applications. Artificial Intelligence (AI) refers to computational tools that can substitute for human intelligence in the performance of certain tasks. AI makes it possible for machines to learn from experience, adjust to new inputs and perform human-like tasks. Since IoT platforms provide an interface to gather the data from various devices, they can easily be deployed into AI/ML systems. The value of AI in this context is its ability to quickly mangle insights from data. Its ability to automatically identify patterns and detect anomalies in the data that smart sensors and devices generate — information such as temperature, pressure, humidity, air quality, vibration, and sound can be really helpful.

RECOMMENDED TOPICS:

Topics to be discussed in this special session include (but are not limited to) the following:

- **Internet of Things**
- **Smart Medical devices**
- **Cloud, Edge and Fog Computing**
- **AI enabled IoT Systems for Tracking and sending Alert**
- **Artificial Intelligence and in IoT in Remote Health Monitoring**
- **Medical Expert Systems and Telemedicine**
- **Energy Efficient Network Design for IoT Healthcare Applications**
- **Improved Disease Diagnosis using Artificial Intelligence**
- **Enhanced Drug Management using AI and Machine Learning**
- **Interoperability and Integration of Emerging Standards with Existing Standards**
- **Security and privacy innovation for IoT applications**
- **Smart IoT devices for elders and differently abled.**
- **Wireless Sensor Networks**

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this special theme session on **Incubation of Artificial Intelligence and IoT for Healthcare on or before [November 30, 2023]**. All submissions must be original and may not be under review by another publication. INTERESTED AUTHORS SHOULD CONSULT THE CONFERENCE'S GUIDELINES FOR MANUSCRIPT SUBMISSIONS at <https://ca.chitkara.edu.in/icantci2024/#>. All submitted papers will be reviewed on a double-blind, peer review basis.

NOTE: While submitting paper in this special session, please specify **Incubation of Artificial Intelligence and IoT for Healthcare** at the top (above paper title) of the first page of your paper as a header and notify your paper id to any of the session chairs.

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