



**ICICC-2023**  
**6<sup>th</sup> International Conference on Innovative Computing and  
Communication**

Organized by Shaheed Sukhdev College of Business Studies, New Delhi, India  
On 17-18th FEBRUARY 2023.

**\*\*\*\*\* CALL FOR PAPERS \*\*\*\*\***

**SPECIAL SESSION ON**

**Role of ML and DL Techniques in Healthcare: Security, Privacy & Open Challenges**

**SESSION ORGANIZERS:**

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**EDITORIAL BOARD: (Optional)**

[Name, University or Organization, Country, e-mail]

**SESSION DESCRIPTION:**

In recent years, machine learning has raised expectations for artificial intelligence technology, particularly deep learning, demonstrating exceptional performance in image identification, natural language processing, pattern matching, face recognition, and other areas. Deep Learning models have various advantages such as fast calculation of complicated problems, maximal application of unstructured data, decreased costs, and many more, but they also have some drawbacks such as opaqueness, computationally intensive, and so on. However, deep learning-based applications are utilized in day-to-day routines and work on massive amounts of data to attain higher accuracy; if these models lead to mistakes due to malicious actions, it will become onerous; thus, protecting the data from security breaches is a key worry. The session focus on the current issues with the patient's privacy and data security but climbing costs and ever growing concern with the ability of organization to protect against breaches. The issues include, data breaches in healthcare organization is growing at a rapid rate, the use of mobile devices are putting the patient's data at risk, unauthorized access to

patient's information, and medical identity theft is at a greater risk to patients. This also emphasizes on recent breakthroughs and problems in deep learning security and privacy issues, emphasizing current state-of-the-art methods, methodologies, implementation, attacks, and countermeasures. It is very important to examine the security concerns and related countermeasure approaches of AI models in healthcare. It not only includes the constraints that must be overcome the issues while developing AI-based security mechanisms but also enlist techniques including federated learning, cloud computing, etc., which is capable of gathering or sharing data across several healthcare applications securely and privately.

We encourage high-quality, original research that are closely related to the field on intelligence of things, IoMT, smart information processing, machine learning, deep learning, computational intelligence techniques, security and privacy, threats and vulnerability analysis.

#### **RECOMMENDED TOPICS:**

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

1. **Data Security and Privacy issues in healthcare**
2. **Authentication and Access Control using deep learning techniques**
3. **Adaptive and Adversarial Attacks through artificial intelligence**
4. **Artificial Intelligence in healthcare**
5. **Intrusion Detection in healthcare through deep learning**
6. **Threat Modelling in healthcare**
7. **Vulnerability Analysis using deep learning techniques in healthcare**
8. **Key Management using IoMT**
9. **Availability and Recovery using artificial intelligence techniques**
10. **Security Issues and Defense Mechanisms Using IoMT**
11. **Attack pattern detection and Prediction in healthcare**
12. **Risk assessments and identification strategies**

#### **SUBMISSION PROCEDURE:**

Researchers and practitioners are invited to submit papers for this special theme session on **[session name] on or before [30<sup>th</sup> November 2022]**. 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 [http://icicc-conf.com/paper\\_submission.html](http://icicc-conf.com/paper_submission.html). All submitted papers will be reviewed on a double-blind, peer review basis.

**NOTE:** While submitting paper in this special session, please specify **[Session Name]** at the top (above paper title) of the first page of your paper.

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