



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

SPECIAL SESSION ON

Attacks and Defenses in Cybersecurity, User Authentication and Machine Learning

SESSION ORGANIZERS:

- 1. Dr. Zahid, State University of New York Polytechnic Institute, Utica, USA, <u>akhtarz@sunypoly.edu</u>
- 2. Dr. Vandana Sharma, CHRIST (Deemed to be University) Delhi NCR, India, vandana.juyal@gmail.com

SESSION DESCRIPTION:

The cybersecurity domain is dedicated to safeguarding digital data, systems, networks, and privacy. The user authentication domain is at the forefront of securing digital interactions and protecting sensitive information in an increasingly interconnected world by verifying the identity of individuals accessing digital systems and services. While, the machine learning domain stands at the forefront of artificial intelligence, playing a pivotal role in various applications. But, cybersecurity, user authentication and machine learning are daily facing emerging and sophisticated landscape of threats. Thus, the fields of cybersecurity, user authentication and machine learning are constantly evolving individually as well as sympatrically in order to develop advanced systems and robust defense mechanisms. Despite remarkable progress, there is still a huge need to understand and address the growing security vulnerabilities of cybersecurity, user authentication and machine learning systems by devising innovative and multifaceted strategies to protect against malicious actors. This special session aims at providing a platform for researchers and practitioners to explore the diverse and latest advances in attacks and defenses.

RECOMMENDED TOPICS:

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

• Cyber-attack techniques and Cyber defense strategies

- Authentication protocols
- Biometrics and Multi-factor authentication
- Authentication in IoT and mobile environments
- AI and machine learning in cybersecurity
- Adversarial machine learning and Adversarial examples
- Critical infrastructure security
- Privacy-preserving in user authentication/ML/cybersecurity
- Blockchain based cybersecurity Usability and user experience
- Data analytics for Smart city
- Explainable AI and Interpretability for Security in cloud computing
- Threat intelligence and Security in deep learning
- Internet of Medical Things (IoMT) security
- Real-world case studies

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this special theme session on Attacks and Defenses in Cybersecurity, User Authentication and Machine Learning on or before [November 15, 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 <u>https://ca.chitkara.edu.in/icantci2024/#</u>. All submitted papers will be reviewed on a double-blind, peer review basis.

NOTE: While submitting paper in this special session, please specify **Security of Cybersecurity**, **User Authentication and Machine Learning** at the top (above paper title) of the first page of your paper as a header.

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