

CALL FOR PAPERS
SPECIAL SESSION/Workshop ON
Advanced AI in Cybersecurity
for CDMA'25

Feb 16-17, 2025, Riyadh, Saudi Arabia

Session/Workshop Chair:

Prof. Rabie A. Ramadan

Department of Information Systems, College of Business, Management, and Information Systems, Nizwa University, Oman.

Session description:

The rapid advancement of Artificial Intelligence (AI) technologies has significantly impacted various domains, including cybersecurity. Leveraging AI for cybersecurity provides innovative solutions to detect, mitigate, and prevent cyber threats, ensuring the protection of digital assets and infrastructures. This special issue aims to compile state-of-the-art research and developments in the application of advanced AI techniques to enhance cybersecurity, addressing both theoretical and practical aspects.

As cyber threats become increasingly sophisticated and pervasive, traditional cybersecurity measures are often insufficient to protect against new and emerging attacks. AI offers a transformative approach by providing dynamic, adaptive, and intelligent security mechanisms capable of anticipating, identifying, and neutralizing threats in real time. This special issue seeks to explore the multifaceted role of AI in cybersecurity, focusing on dynamic threat detection, predictive analytics, intelligent automation, adaptive security mechanisms, and enhanced accuracy. By integrating AI into cybersecurity frameworks, this special issue aims to highlight the significant improvements in defense strategies and the proactive mitigation of sophisticated cyber threats, ensuring a robust and resilient digital security environment.

Topics of interest for this Special session include but are not limited to the following:

- ✓ AI-driven threat intelligence and analysis
- ✓ Machine learning for intrusion detection and prevention
- ✓ AI for malware analysis and detection
- ✓ Secure AI models and privacy-preserving machine learning
- ✓ Adversarial machine learning and defenses
- ✓ AI in secure network communications
- ✓ AI for endpoint and cloud security
- ✓ AI in identity and access management
- ✓ Ethical, legal, and societal implications of AI in cybersecurity
- ✓ AI for incident response and threat hunting
- ✓ AI applications in fraud detection and prevention
- ✓ Deep learning and neural networks for cybersecurity
- ✓ AI-driven security analytics and visualization
- ✓ Blockchain and AI integration for cybersecurity
- ✓ Behavioral analysis using AI for cybersecurity

Submission

Papers must be submitted electronically for peer review by: **October 31, 2024**
https://easychair.org/account2/signin_timeout?l=6366112383385508012

All papers must be written in English and should describe original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double column format).