

## Special Issue

# Artificial Intelligence and Cybersecurity: Challenges and Opportunities

### Message from the Guest Editors

Artificial intelligence (AI) is rapidly transforming the cybersecurity landscape, presenting unprecedented opportunities and significant challenges. This Special Issue will explore this evolving relationship, delving into the latest research, innovations, and critical analyses at the intersection of AI and cybersecurity. We welcome submissions that cover a broad range of topics, including, but not limited to, the following:

- AI-based threat detection and response;
- AI for security analytics and threat intelligence;
- AI in malware detection and analysis;
- Automated vulnerability assessment and penetration testing using AI;
- AI for risk assessment and compliance management in cybersecurity;
- Adversarial machine learning in cybersecurity;
- Robustness and reliability of AI-based cybersecurity systems;
- Privacy and ethical considerations in AI-driven cybersecurity.

We expect this Special Issue to provide a timely and significant platform for researchers and practitioners to present their latest findings and foster collaboration in this rapidly evolving field. We look forward to receiving your contributions.

---

### Guest Editors

Dr. Emil Pricop

Automatic Control, Computers & Electronics Department, Petroleum-Gas University of Ploiesti, 100680 Ploiesti, Romania

Dr. Khalil El-Khatib

1. Faculty of Business and Information Technology, Ontario Tech University, Oshawa, ON, Canada
2. Institute for Cybersecurity and Resilient Systems (ICRS), Faculty of Business and Information Technology, Ontario Tech University, Oshawa, ON, Canada

---

### Deadline for manuscript submissions

closed (1 August 2025)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/214727](https://mdpi.com/si/214727)

*Applied Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[appls@mdpi.com](mailto:appls@mdpi.com)

[mdpi.com/journal/  
appls](https://mdpi.com/journal/appls)





# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/journal/  
applsci](https://mdpi.com/journal/applsci)



## About the Journal

### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

---

### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,  
20133 Milano, Italy

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering )