

CCI 2023

Cybersecurity of Critical Infrastructures

Special Session organized within the

International Workshop on Computer Aided Modeling and Design of Communication Links and Networks (CAMAD 2023)

<https://camad2023.ieee-camad.org/>

6–8 November 2023 // Edinburgh, Scotland // Edinburgh Napier University

Critical infrastructures are vital assets for public safety, economic welfare, and the national security of countries. Vulnerabilities of critical infrastructures have increased with the widespread use of information technologies. As Critical National Infrastructures are becoming more vulnerable to cyberattacks, their protection becomes a significant issue for any organization as well as nation. The risks to continued operations from failing to upgrade aging infrastructure or not meeting mandated regulatory regimes are considered higher given the demonstrable impact of such circumstances.

Due to the rapid increase of sophisticated cyber threats targeting critical infrastructures with significant destructive effects, the cyber security of critical infrastructures has become an agenda item for academics, practitioners, and policy makers. A holistic view which covers technical, policy, human, and behavioral aspects is essential to handle cyber security of critical infrastructures effectively. Moreover, the ability to attribute crimes to criminals is a vital element of avoiding impunity in cyberspace.

In this Special Session, both research and practical aspects of cyber security considerations in critical infrastructures are of interest. Aligned with the interdisciplinary nature of cyber security, authors from academia, government, and industry are welcome to contribute.

We seek original and high-quality submissions on, but not limited to, one or more of the following topics:

Cyber security of industrial control systems;

Cyber security modeling and simulation;

Cyber security of complex and distributed critical infrastructures;

Cyber threat modeling and analysis;

Safety-security interactions;

Behavioral modeling;

Network security and protocols;

Security, privacy, and legal issues of big data and the Internet of Things;

Cyber threat intelligence;

Situational awareness;

Attack modeling, prevention, mitigation, and defense;

Critical infrastructure security policies, standards and regulations;

Vulnerability and risk assessment methodologies for distributed critical infrastructures;

Risk management and cyber insurance;

Simulation and test beds for the security evaluation of critical infrastructures;

Resiliency and security of cyber systems;

Cyber security and privacy policy;

Hardware security solutions;

Incident response;

Encryption, authentication, availability assurance;

Human awareness and training;

Intrusion detection;

Trust and privacy;

Secure communication protocols;

Malware analysis;

Blockchain and ZKPs

Important Deadlines

Full Paper Submission: August 20, 2023

Notification of Authors: October 1, 2023

Camera-Ready Papers: October 10, 2023

Submission & Registration

Authors are invited to submit original manuscripts, in English, limited in length to six (6) pages.

The submitted papers will be peer-reviewed on the basis of technical quality, relevance to scope of CAMAD, originality, significance, and clarity. Note that submitted papers should have neither been published nor submitted for publication elsewhere.

Submission platform: EDAS submission platform. Choose special session: Cybersecurity of Critical Infrastructures (CCI)

Registration: At least one author of each paper must register and present the paper at the conference.

Session Chairs

Leandros Maglaras, Edinburgh Napier University, L.maglaras@napier.ac.uk

Sokratis Katsikas, Norwegian University of Science and Technology, sokratis.katsikas@ntnu.no

Bill Buchanan, Edinburgh Napier University, B.Buchanan@napier.ac.uk

Technical Program Committee

Tiago Cruz, University of Coimbra, PR

Nestoras Chouliaras, University of West of Attica, GR

Mohamed Amine Ferrag, TII, Abu Dhabi, UAE

Vasileios Germanos, De Montfort University, UK

Vasileios Gkioulos, Norwegian University of Technology and Science, NO

Thanos Kakarountas, University of Thessaly, GR

Ioanna Kantzavelou, University of West Attica, GR

Georgios Kavallieratos, Norwegian University of Science and Technology, NO

Dimitrios Kosmanos, University of Thessaly, GR

Naghmeh Moradpoor, Edinburgh Napier University, UK

Sotiris Moschoyiannis, University of Surrey, UK

Manos Panaousis, University of Greenwich, UK

Iqbal Sarker, Edith Cowan University, AU

Christos Tselikis, University of Piraeus, GR

Vasileios Vlachos, University of Thessaly, GR

Yagmur Yigit, Edinburgh Napier University, UK

Nikolaos Vakakis, Centre for Research and Technology, GR