



The 1st International Conference on Big Data and Security

Nanjing, China • December 20-22, 2019



Workshop

Title:

Intelligent Cybersecurity Systems

Abstract:

Cybersecurity and Artificial Intelligence (AI) are presently at the forefront of most modern establishments. The boundaries between the cyber- and the real-world are increasingly blurred. The increase in the use of IoT devices, AI technologies, data analytics and the cloud, digital threats to the establishments and their data have increased multi-folds. Measures to safeguard the IoT devices and networks include AI techniques as alternatives to classical security measures. However, the potential of AI is being misused by negative elements making it a challenging deadlock like situations where the AI-based techniques to safeguard the network is challenged by intelligent attacks that employ AI as well. As soon as a networked device is compromised, personal health, finance and other information may be leaked. AI it is a double-edged sword that can deliver enormous benefits, and at the same time, can be utilized for malicious purposes. With AI being applied to various vertical fields, its development trend in various countries in the world indicate that network security will face more complex, in-depth and severe challenges. Therefore, developing new artificial intelligence algorithms and applying them to protect cyberspace, as well as developing new security algorithms and applying them to protect the integrity and security of artificial intelligence algorithms themselves will be the main research content of this workshop.



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Scope and Topics:

Artificial Intelligent (AI) based Cybersecurity Systems has become an increasingly significant area for research, education, and industries. The international workshop on Intelligent Cybersecurity Systems in conjunction with Conference on Big Data and Security, is a comprehensive and inclusive forum for researchers, academics, and industry professionals to present and discuss various theoretical and practical issues, solutions, and findings in the emerging and fast-growing field of Cybersecurity.

The workshop seeks original research papers that address the following non-exhaustive but are not limited to:

- Intelligent Cybersecurity Systems architectures, frameworks, and models.
- Hardware level Security.
- Software Security
- Intelligent Data Collection Security and Protection against malicious samples, erroneous data, and noise.
- Intelligent model security: model detectable, verifiable, and interpretable.
- Model application security: isolation, detection, redundancy and fusing of AI system
- Intelligent Network Security: Attack and Defense.
- Intelligent Cybersecurity Systems for Smart Home Security
- Social, Economic, and Global Aspects of Intelligent Cybersecurity Systems.



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Program Committee Chairs:

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