



# The 1st International Conference on Big Data and Security

Nanjing, China • December 20-22, 2019



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## Workshop

### Title:

Cyber Infrastructure Security and Artificial Intelligence (CIS-AI)

### Abstract:

In large scale and sensitive organizations, securing data is not the only concern. The organizations also need to plan and develop a security mechanism to secure overall cyber infrastructure. This workshop is a step towards the design and development of tools and techniques for providing cyber-resilience using Artificial Intelligence (AI) that will protect and consistently monitor critical cyber infrastructure in organizations. The objective is to provide a platform to the experts in the field where topics like modern cyber-attacks, profile-based organization's infrastructure security, and investigation and inspection of packet on the network through data science and AI can be address. In addition, this workshop will also address the numerous challenges faced by conventional machine learning and data mining methodologies where state-of-the-art data science and AI algorithms can assist in building much needed cyber resilient defense and monitoring system and capabilities to protect the underline critical cyber infrastructure.

### Scope and Topics:

The proposed workshop on Cyber Infrastructure Security and AI aims to provide a platform to academia researchers as well as industry partners where they can exchange ideas and solutions on recent research and future directions for the applications of data science and AI in the field of Cyber Infrastructure Security. This workshop solicits original research papers that addresses the following



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non-exhaustive list of topics:

## Topics:

- Cyber infrastructure security categorization and awareness
- Cyber infrastructure security and privacy threats
- Data science driven threats identification
- Data science driven security threats management and mitigation
- Comparative analysis of machine learning techniques and data science techniques for cyber security
- AI based cyber resilience against cyber threats
- Profile based pre-cyber infrastructure security using AI
- Role of AI in advance identification and alert of cyber infrastructure threats
- Emerging role of AI in cyber security

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