# **Special Issue**

# Applications of Deep Learning in Cyber Threat Detection

## Message from the Guest Editors

The exponential growth of network intrusions and cyberattacks poses a significant threat to critical infrastructure across various sectors. This growth necessitates the development of advanced artificial intelligence techniques for cyber threat detection where securing current systems and networks against such threats. Potential topics of interest include, but are not limited to, the following:

- Deep learning methods for advanced network intrusion detection;
- Deep learning-based ensemble learning methods for cyber threat detection;
- Explainable Al for explaining black-box deep learning methods in network intrusion detection:
- Efficiency analysis and optimization of deep learning methods for cyber threat detection;
- Deep learning methods for detecting threats to Internet-of-things (IoT) networks:
- Feature selection for enhancing performance of deep learning methods for cyberthreat detection;
- Evaluation frameworks for current deep learning methods for cyber threat detection;
- Reliability of deep learning-based cyber threat detection methods;
- Adversarial attacks on deep neural networks for cyber threat detection.

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## Deadline for manuscript submissions

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