Security and Communication Networks

Special Issue on
Practical Applications of New and Unconventional Machine-Learning Solutions for Cybersecurity

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CALL FOR PAPERS

Nowadays, cybersecurity should be considered as a crucial aspect of secure societies, IT systems dependability, and critical infrastructure protection. In order to effectively protect computer systems, computer networks, and critical infrastructures, new advanced solutions, especially in the field of intelligent machine learning, are needed. One of the current challenges of artificial intelligence is to build reliable and scalable lifelong machine-learning (LML) methods. The LML concept perfectly suits the variety of problems in cybersecurity domain, where each new cyberattack can be considered as a new learning task. As the system evolves, the knowledge should be accumulated and transferred in order to make the detection process more accurate.

We invite prospective authors to submit papers presenting new, innovative, future, and emerging machine-learning methods applied to solve cybersecurity problems and challenges. We cordially invite the papers presenting practical implementations of the emerging solutions. In particular, we cordially invite prospective authors to submit papers on some topics (list is not exhaustive) related to cybersecurity challenges.

Potential topics include but are not limited to the following:

▶ Practical implementations of lifelong machine learning (LML) for network anomaly detection

▶ Practical implementations of hybrid intelligent classification systems for cyber threats detection

▶ Practical implementations of deep learning methods applied to pattern extraction in cybersecurity-related traffic

▶ Unconventional machine-learning techniques such as granular computing and reservoir computing applied to cyber threats detection and classification

Authors can submit their manuscripts through the Manuscript Tracking System at https://mts.hindawi.com/submit/journals/scn/aecc/.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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