Proposal for Special Session on

"Artificial Intelligence for Cyber Security"

Chaired and Organized by

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The theme of the Special Session

Artificial intelligence (AI) has been applied widely to address cyber security problems. Cyber-attacks, however, are growing in volume and complexity. This is of greater concern in the area of sensors and sensing technology, as they are increasingly used in all sorts of platforms inspired by the emerging Internet of Things. There is a critical need for the development of advanced cybersecurity methods to mitigate and eliminate the impacts of cyber-attacks. Protecting and defending mechanisms are required to be more responsive, adaptive, and scalable. Advances in AI can be highly capable of solving complex, dynamic, and especially high-dimensional cyber security problems. They can help to provide more accurate detection, effective response automation, and proactive protection mechanism.

Topics include but are not limited to:

- Cyber Security
- Cyber Situational Awareness
- > Cyber Threat Intelligence
- Artificial Intelligence
- Machine Learning
- Formal Knowledge Representation
- Automated Reasoning