



INVITED SESSION SUMMARY (IDT-19)

Title of Session: Intelligent Decision Support in Cybersecurity

Name, Title and Affiliation of Chair: Dr. Leslie F. Sikos, University of South Australia

Details of Session (including aim and scope):

Responding correctly and in a timely manner to the growing number of cyberthreats is an increasingly challenging problem. Artificial intelligence applied in analytics tools and recommender systems play a crucial role in assisting decision-makers to produce better and better metrics for spotting and reacting to threats. This workshop attracts innovative ideas and novel approaches that are needed to maximize the potential of AI in intelligent decision-making and consider the large number of factors typical to both cyberthreat prevention and countermeasures, such as situation complexity, viable alternatives, outcome uncertainty, and potential gain or loss.

Submissions are expected from, but are not limited to, the following topics:

- Autonomous security countermeasure recommender systems
- Knowledge organization systems for cyberthreat intelligence used for decision-making
- Automated reasoning-powered cybersituational awareness to help decision-makers
- Cyber-physical systems with sensors and actuators that enable intelligent decision-making
- Intelligent action recommendations in security software tools
- Intelligent security automation tools for analysts

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

Leslie F. Sikos, Advanced Computing Research Centre, University of South Australia, Australia

Website URL of Call for Papers (if any): TBD

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