



INFORMS Annual Meeting  
October 20-23, 2019

## INFORMS Session: Artificial Intelligence for Cybersecurity

Dear Colleagues,

To promote the AI track, we invite you to submit your papers, abstracts, or posters to the 2019 INFORMS Annual Meeting to be held at the Washington State Convention Center, Seattle, Washington on October 20-23, 2019. The deadline for us to enter presenters into our invited session is **May 10<sup>th</sup>** and the deadline for submitting your complete abstract is **May 15<sup>th</sup>**. Thus, if you are interested in contributing to our session, we encourage you to respond to this call at your earliest time.

### DESCRIPTION

The next generation of Artificial Intelligence (AI) and Machine Learning (ML) are increasingly incorporated in cybersecurity solutions. Experts predict that, over time, companies will incorporate AI into every cybersecurity product portfolio. While AI and ML increase the defenders' capability to detect and prevent abnormal behavior patterns, attackers are also using AI and ML to learn about a target's vulnerabilities and launch attacks. In this session, we solicit high-quality original research papers, both theoretical and empirical, that address the issues of AI aid, misuse and threat in cybersecurity in different contexts such as business, healthcare, education, politics, and economics.

Topics may include but are not limited to the following:

- The state of AI for cybersecurity
- AI applications in various security aspects
- Machine learning/deep learning algorithms to detect cyber threats
- Methodological approaches of open source machine learning
- Improving the success rate of detecting cyber attacks
- Cognitive AI security: Collaboration between AI and human intelligence
- Dark side of AI, misuse and AI threat
- Better practices for AI to prevent or defense a cyber-attack
- Are signatures and intrusion patterns enough?
- AI governance and privacy issues
- Government regulation and AI cybersecurity
- Other issues pertaining to AI cybersecurity

This year, the theme of the meeting lies on new developments of augmented technologies and their impacts which blends the growing role of Artificial Intelligence & Analytics techniques for understanding natural and artificial systems with computing and communication technologies to drive decision making for enriching our personal lives and enhancing our professional activity.

Seattle, also known as The Emerald City, is nestled among snow-capped mountains and evergreen trees near the Pacific Coast. This largest city in the Pacific Northwest region of the USA is home to major universities, corporations, hospitals, and philanthropic organizations. Seattle has seen rapid growth over the recent decades and become a thriving technological hub. The conference will be held in a bustling area near many restaurants, bars, and shops, not far from iconic landmarks such as the Space Needle and the Pike Place Market. Join thousands of students, professionals, and academicians to explore ideas at the forefront of theory and practice of OR/MS, data science, analytics, artificial intelligence, and machine learning, within the context of applications such as education, energy, healthcare, humanitarian logistics, manufacturing, revenue management, supply chain management, sustainability, and transportation.

The 2019 INFORMS Annual Meeting is a unique opportunity to connect and network with the more than 6,000 INFORMS members, students, prospective employers and employees, and academic and industry experts who compose the INFORMS community. We look forward to seeing you in Seattle, WA, October 20-23, 2019!

With over 12,500 members from around the globe, INFORMS (The Institute for Operations Research and the Management Sciences) is the leading international association for professionals in Operations Research, Management Science, Information Systems and Business Analytics.

INFORMS promotes best practices and advances in operations research, management science, and analytics to improve operational processes, decision-making, and outcomes through an array of highly-cited publications (e.g.: Operations Research, Information Systems Research, Organization Science, Management Science), conferences, competitions, networking communities, and professional development services.

On behalf of the organizing committee, we invite you to join us in the 2019 INFORMS Annual Meeting in Seattle for an opportunity to learn, inform and enjoy the culture, weather and all the amenities the Emerald City has to offer.

Best regards,

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## **SUBMISSION PROCESS**

### **Invited Sessions & Sponsored Presentations**

Presenters will be notified by email to submit their individual abstracts after the Session Chair has submitted the session.

If you have not received an invitation to submit from a Session Chair you will not be able to log in through the system.

### **Contributed Presentations**

If you wish to contribute an abstract and have NOT received an invitation from a Session Chair, Submit an abstract for contributed presentations.

Track Session: Artificial Intelligence for Cybersecurity  
Please contact Tung Cu at [tcu@bloomu.edu](mailto:tcu@bloomu.edu) if you have a question.

### **Submission Deadline for Contributed, Sponsored and Emerging Abstracts**

**May 15**

### **Last Day for Changes**

Last day to make changes to existing abstracts is June 18, 2019.

ALL SPEAKERS MUST BE REGISTERED – by September 10, 2019. If speakers are not registered by September 10, 2019, the speaker will be notified that the presentation will be removed from the program. Any change to the presenting author must be made by September 10, 2019