

Avinash Prasad and Indira Prasad | NYU and Steven Institute of Technology: "Advancements in Railroad Engineering Transition from Conventional Railroad to Hybrid Maglev Technology"

Justin Smith | Collins Aerospace: "Threat Modeling: An Essential but Practical Exercise – Railway Perspective"

Collin Meese and Mark Nejad | University of Delaware: "Blockstack – Inspired Information Sharing Architecture for Two-Sided Ridesharing Mechanisms"

2:00PM - BREAK

2:05 PM - SESSION V: Railway Systems and Infrastructures

SESSION CHAIR: Jeffrey Baca | ENSCO

Nii Attoh – Okine and Ibrahim Balogun | University of Delaware: "Cyber Rail: Use of Blockchain Technology in Rail track Safety and Maintenance"

Avinash Prasad and Indira Prasad | NYU and Stevens Institute of Technology: "Advancements in Railroad Engineering – Regenerative Braking Systems."

Avinash Prasad and Indira Prasad | NYU and Stevens Institute of Technology: "Significance of Suitable + Resilient Infrastructure Systems"

3:05-5:10PM - SESSION VI: Ransomware Scenarios

Sponsored by Department of Technology and Information, State of Delaware, CIO: Mr. James Collins, CSO: Mr Solomon Adote Certificate, Continuous Education
Continuing Professional Education Credits | 4 CPEs

5:15PM - CLOSING REMARKS

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CYBERSECURITY INITIATIVE

INTERNATIONAL WORKSHOP ON CYBER-PHYSICAL SYSTEMS AND CYBER-RESILIENCE

UNIVERSITY OF DELAWARE | NEWARK, DELAWARE

MARCH 11-12, 2020

Bringing together public, private and international partners to discuss interdisciplinary cybersecurity and resilience strategies across our critical cyber-physical systems

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CYBERSECURITY INITIATIVE

INTERNATIONAL WORKSHOP ON CYBER-PHYSICAL SYSTEMS AND CYBER-RESILIENCE

DAY 1 — MARCH 11 | 4:30PM – 6:30PM

Pre-Conference Get Together

DAY 2—MARCH 12 | 7:30AM – 5:15PM

7:30AM - REGISTRATION/BREAKFAST

8:00AM - WELCOME

CONFERENCE CHAIR: [Nii Attoh-Okine](#) | Interim Academic Director, University of Delaware, Cybersecurity Initiative: “Workshop Goals and Objectives”

8:10AM - OPENING REMARKS

[Charles Riordan](#) | Vice President for Research, Scholarship and Innovation, University of Delaware

[Levi Thompson](#) | Elizabeth Inez Kelley Professor of Chemical Engineering, Dean of Engineering, University of Delaware

[Kenneth Barner](#) | Charles Black Evans Professor and Chair, Electrical and Computer Engineering, University of Delaware

8:20AM - KEYNOTE SPEAKER

[Anton Dahbura](#) | Co-Director, Johns Hopkins University Institute for Assured Autonomy

“Autonomous Systems: What Can Possibly Go Wrong?”

8:50AM

[Tetsuya Sakurai](#) | Director, Center for Artificial Intelligence, University of Tsukuba, Tsukuba, Japan: “University of Tsukuba, University of Delaware and John Hopkins NEDO Project”

9:10AM - SESSION I: Cyber-Physical Systems

SESSION CHAIR: [Anna Bogdanova](#) | University of Tsukuba, Japan

[Ambrose Kam](#), [Arlanda Johnson](#), [Katrina Bergman](#), and

[Charles Johnson-Bey](#) | Lockheed Martin Rotary Mission System:

“Misinformation Disinformation Detection Using Long, Short-Term(LSTM) and Word Embedding Machine Learning Techniques”

[Theresa Suloway](#) | MITRE: “Highlighting the Importance of Cyber Security for Cyber-Physical Systems from IoT to UAS”

[Avani Dave](#), [Nilanjan Banerjee](#), [Ryan Robucci](#) and [Chintan Patel](#) | UMBC: “CARE: Lightweight Attack Resilient Secure-Boot Architecture for Cyber-Physical Systems on RISC-V”

10:10AM - BREAK

10:15AM - SESSION II: International Perspectives

SESSION CHAIR: [Nil Kilicay-Ergin](#) | Penn State

[Chinatsu Iha](#) | Japan International Cooperation Agency (JICA): “Japan’s Capacity Building Approaches towards a Free, Fair and Secure Cyberspace in ASEAN Region: The Case in Indonesia”

[Leuka Brumarova](#) and [Jakub Brumar](#) | VSB – Technical University of Ostrava: “Preparedness of Cyber Security in the Czech Republic”

[Darren Wilkins](#) | University of Liberia: “Investigation of the Cybersecurity Aspects of GovNet as a Critical Infrastructure in Liberia”

11:15AM - SESSION III: Cyber Resilience and Risk

SESSION CHAIR: [Tetsuya Sakurai](#) | University of Tsukuba, Japan

[Ambrose Kam](#), [Arlanda Johnson](#), [Katrina Bergman](#), and

[Charles Johnson-Bey](#) | Lockheed Martin: “Quantifying Cyber Resilience”

[Solomon Adote](#) | CSO, State of Delaware: “Cyber Risk Management in a highly Targeted Smart City Threat Landscape”

[Andrian Barb](#) and [Nil Kilicay-Ergin](#) | Penn State: “Knowledge Elicitation Methodology for System Analysis of Privacy Risks in Smart Cities”

[Brian Croteau](#), [Nilanjan Banerjee](#), [Saad Rahman](#), and [Ryan Robucci](#) | UMBC: “Dynamic Rudder Actuation and Ship Path Planning”

[Nii Attoh-Okine](#) | University of Delaware: “Blockchain Technology and Digital Delaware-Partnership between State of Delaware and University of Delaware”

12:30 PM - LUNCH & LUNCHEON SPEAKER

[Kevin Kornegay](#) | School of Electrical and Computer Engineering, Morgan State University: “Reducing the IoT Cybersecurity Attack Surface”

1:00 PM - SESSION IV: Railway Systems

SESSION CHAIR: [Allan Zarembski](#) | University of Delaware

[Jeffery Baca](#), [Ruben Pena Bolivar](#), and [Stephen Treanor](#) | ENSCO, Aerospace Science and Engineering Division: “Cybersecurity in Surface Transportation – Continuous Monitoring and Detection”