

Final Agenda

Thursday, Feb. 1

6:00-7:30pm

Reception

King and Prince Hotel, Solarium

Technical Program

Trustworthy AI-Enabled Cyber-Physical Systems

Organizers: Homa Alemzadeh, Saman Zonouz

Location: King and Prince Hotel, Retreat Room (everything except lunches)

Friday, Feb. 2, 2024

7:15-8:00am Breakfast

8:00-8:30am Welcome and Introductions

Marco Vieira, University of North Carolina at Charlotte

Doug Blough, Georgia Tech

Homa Alemzadeh, University of Virginia

Saman Zonouz, Georgia Tech

Session 1 - ML/AI Verification in CPS

Session Chair: Marco Vieira, Scribe: Lishan Yang

8:30-9:15am Neural Network Verification in Autonomous Cyber-Physical Systems

Taylor Johnson, Vanderbilt University

9:15-10:00am Assured Perception and Control of Autonomous Systems Using

Formal Verification of Neural Networks

Yasser Shoukry, UC Irvine

10:00-10:30am Discussion

10:30-11:00am Coffee Break

Session 2 - Safety and Security of ML-Enabled CPS

Session Chair: Domenico Cotroneo, Scribe: Carl Landwehr

11:00-11:45pm Building Error-resilient and Attack-resilient ML-enabled CPS

Karthik Pattabiraman, UBC

11:45-12:30pm No-Regret Learning for Trustworthy Online Decision-Making

Mahsa Ghasemi, Purdue

12:30-1:00pm Discussion

1:00- 3:30pm Lunch (King and Prince, Solarium) and Break

3:30- 4:00pm Coffee Break

Session 3 - Trustworthy CPS and Educational Initiatives

Session Chair: Illir Gashi, Scribe: Rick Schlichting

4:00-4:15pm Attacks and Defenses in Multi-robot Systems

Cristina Nita-Rotaru, Northeastern University

4:15-4:30pm Educational Efforts to Enhance Cybersecurity at William & Mary

Evgenia Smirni, William & Mary

4:30-4:45pm The Security of Engineered Systems

Michael Bailey, Georgia Tech

4:45-5:15pm Discussion

Saturday, Feb. 3, 2024

8:00-9:00am Breakfast

Session 4 - Neurosymplic AI in CPS

Session Chair: Charles Weinstock, Scribe: Karthik Pattabiraman

9:00-9:45am A Trip to the Neural Frontier: Neurosymbolic Sensor Fusion for

Trustworthy CPS

Luis Garcia, University of Utah

9:45-10:30am Predictive Monitoring and Safety Shielding for Al-Enabled CPS

Lu Feng, University of Virginia

10:30-11am Discussion

11:00-11:30am Coffee Break

Session 5 - Industry Panel

Session Chair: Lelio Di Martino, Scribe: Long Wang

11:30-12:30pm Watch out for the Risky Actors: Assessing and Mitigating Risk in

Dynamic Environments for Safe Driving

Saurabh Jha, IBM

Combating Digital Deception: Trustworthy AI in the Bot & Fraud

Space Yi Han, F5

Challenges of Using AI in Automotive CPS

Ramon Serna Oliver, TTTech

12:30-1:00pm Discussion

1:00- 3:30pm Lunch (King and Prince, Solarium) and Break

3:30- 4:00pm Coffee Break

Session 6 - Workshop Wrap-Up

4:00-5:00pm Session chair reports, discussion, and workshop wrap-up

End Technical Program

Sunday, Feb. 4, 2024:

1:00pm Bus pick-up for excursion

King and Prince, Lobby

7:00pm **Dinner**

King and Prince, Solarium

Monday, Feb. 5, 2024:

8:00-8:30am **Breakfast**

8:30–10:00am Business meeting (members only)

10:00-10:30am Break, hotel check-out

10:30am–12:30pm Research reports

12:30pm Meeting adjourns