## IoT Workshop National Institute of Standards and Technology

Gaithersburg, MD 13 Sept 2018

## Reasoning about IoT Trustworthiness

The requirements that make up the specification of a CPS or IoT system are numerous; composing independently constructed and verified systems reveals friction between concerns that arise from their assembly into a single system. Understanding requirements' relationships to concerns about the system and their interdependencies can be a challenge. Leveraging their interdependencies however is a major opportunity. This workshop will review approaches, including tools, for understanding the interplay between the various concerns associated with CPS or IoT system trustworthiness.

"It's tough to make predictions, especially about the future."

Yoqi Berra

Date: September 13, 2018

Location: West Square Room, Bldg. 101, NIST Gaithersburg, MD

**Time:** 8:30 AM to 4:30 PM

## **AGENDA**

8:30 - 9am Registration and Introduction

9am to 10:30 Panel 1: Trustworthiness of IoT

Moderator: M. Burns

- Martin Burns (NIST) Introduction CPS Framework: IoT Foundations
- Marcello Balduccini (St. Joseph's) Executable Models of IoT
- Ed Griffor (NIST) Trust vs. Trustworthiness
- Jeffrey Caso (McKinsey) Beyond Security
- Discussion

10:30-11:00 -- Break

11:00am to 12:30pm - Panel 2: Reasoning for IoT Trust: Approaches and Applications.

Moderator: E. Griffor

- Thomas Heverin (Drexel University/NAVSEA) Practical Applications of Reasoning in Cybersecurity
- Joe Jarzombek (Synopsys) Enabling Automated Digital re-Certification of Cyber-Physical Systems
- Julien Touzeau (Airbus)
- Claire Vishik (Intel) Potential multi-disciplinary use cases
- Discussion

12:30 - 1:30pm Lunch

1:30 to 3:00pm Panel 3:Reasoning as a foundation for multi-disciplinary studies.

**Moderator: C. Vishik** 

- Sergey Bratus (DARPA and Dartmouth)
- Katerina Megas (NIST) IoT Security
- Katie Boeckl (NIST) Privacy Engineering
- Ravi Jain (FAA)
- Eric Osterweil (George Mason University)

Discussion

3:00-3:15pm -- Break

3:15 to 4:15pm – Panel 4: Next steps (Selected participants from previous panels)

Moderator: M. Balduccini

Participants: 3 moderators of the previous panels, one representative from each panel.

- Panel discussion reports, from the representatives
- Questions will be distributed in advance as well as captured from the discussion during the previous panels

4:15pm: Closing, conclusions, adjourn

This workshop will be held in the West Square Meeting Room adjacent to the NIST Cafeteria in Bldg. 101. The NIST Cafeteria is open, for refreshments and meal service, between 11am and 3pm.