

The 1st IEEE International Workshop on Assured Autonomy, Artificial Intelligence and Machine Learning

WAAM 2022

co-located with [ISSRE 2022](#), October 31-November 3, Charlotte, North Carolina, USA

Hybrid Attendance: Both Virtual and In-Person Available

IMPORTANT DATES

Artificial intelligence (AI) and Machine Learning (ML) systems are increasingly seen in many domains such as self-driving land vehicles, autonomous aircraft, and medical systems. AI systems should equal or surpass human performance, but given the consequences of failure in these systems, how do we determine that the data gathered to train an AI system is suitably representative of the real world? How do we assure the public that these systems work as intended and will not cause harm? These questions have given rise to a new term: “assured autonomy.” In this workshop, issues in assured autonomy such as explain ability, bias, verification, validation, privacy, trust and more for AI and ML systems will be explored. Research, experiences and best practices will be presented to illustrate the challenges and possible approaches to assured autonomy. Finally, the road ahead will be explored.

This workshop will bring together participants from industry, academia and government to tackle these challenging issues. In addition to paper presentations, two panel discussions including international experts from government, industry and academia will be conducted.

IMPORTANT DATES

Paper Submission Deadline

August 9, 2022

Paper Notification

August 22, 2022

Camera ready papers

August 26, 2022

TOPICS OF INTEREST

- Specification and requirements engineering for assured autonomy
- Explainable AI: evaluation and testing
- Bias: sources, identification, impact, and reduction/elimination
- Assured autonomy for
 - Transportation, healthcare, financial and all other critical infrastructure systems
 - Space applications
 - Consumer goods and non-critical applications
 - other application domains
- Trust and Artificial trust

- Security, safety and privacy issues for AI/ML systems
- Policies, standards, frameworks, legislative efforts for assured autonomy
 - Related topics

Best papers will be considered for expansion and publication in IEEE Computer magazine.

COMMITTEES

Organizing Committee

[Phil Laplant \(Chair\)](#), Penn State

[Ben Amaba](#), Clarifai

[Rick Kuhn](#), NIST

Program Committee

Feras A. Batarseh	Virginia Tech
Jagan Chandrasekaran	Virginia Tech
Ken Costello	NASA
Joanna DeFranco	Penn State
Laura Freeman	Virginia Tech
Alwyn E. Goodloe	NASA - Langley

Mohamad Kassab	Penn State
Nir Kshreti	University of North Carolina-Greensboro
Lady Linares	Johnson & Johnson
Dejan Milojicic	HP
Kishor Trivedi	Duke University
Jeff Voas	NIST
Matt Zeiler	Clarifai