



2020
SYSTEMS SECURITY
symposium

Marriott Crystal Gateway
Crystal City, Virginia, USA
Washington DC area



AESS
IEEE Aerospace &
Electronic Systems Society

CALL FOR PAPERS

IMPORTANT DATES

July 31, 2019

Special Sessions & Tutorial
Proposals

August 30, 2019

Initial Papers and Extended
Abstracts Deadline

October 31, 2019

Acceptance Notification

CONFERENCE DATES

April 6–9, 2020

Symposium
Marriott Crystal Gateway
Crystal City, Virginia, USA

ORGANIZERS

General Chair

Bob Rassa

IEEE Systems Council
RCRassa@Raytheon.com

Technical Program Chair

Holly Dunlap

NDIA
Holly.Dunlap@raytheon.com

Technical Program Co-Chair

Beth Wilson

INCOSE
wilsondrbeth@aol.com

Technical Program Committee

Steve Holt

IEEE Systems Council
smdholt@gmail.com

Kathleen Kramer

IEEE Aerospace & Electronic
Systems Society
kramer@sandiego.edu

Tom McDermott

Systems Engineering Research
Center
tmcdermo@stevens.edu

Melinda Reed

OUSD (R&E)
melinda.k.reed4.civ@mail.mil

James H. Lambert

University of Virginia
lambert@virginia.edu

Logan Mailloux

United States Air Force
logan.mailloux@us.af.mil

The IEEE-INCOSE-NDIA Systems Security Symposium seeks research papers and application studies that focus on the development of secure, safe, and resilient systems. This symposium attempts to address the convergence of cybersecurity, safety, and engineering with interest in the effective application of security principles, methods, and tools to complex systems such as cyber-physical systems, autonomous systems, transportation vehicles, medical devices, large IoT systems, and other systems of interest. Preference will be given to papers and case studies that bridge theory to practice.

SUBMISSION DETAILS

Theory & Methods

Papers or Extended Abstracts addressing novel ideas, theoretical issues, technology, methodology, or detailed studies. These academic-oriented papers will be peer reviewed and prioritized according to their contribution.

Cases & Practical Experiences

Papers presenting practical ideas, lessons learned, and real-world achievements. Papers are reviewed for relevance but not necessarily academic contribution.

Papers and extended abstracts of both categories will be peer reviewed. Papers will be published in the proceedings with an 8-page maximum. Extended abstracts (typically 3–5 pages) will not be published, but will be available to the conference attendees. Student papers are encouraged in both categories.

All submission details are available on the IEEE-INCOSE-NDIA SSS 2020 Submission Portal at

<https://2020.ieeesystemssecuritysymposium.org>

Tutorials (1/2 day) are encouraged; please add TUTORIAL to your paper title.

Best Paper monetary awards will be recognized for professional and student papers.

Table top exhibits are available on a first come, first serve basis. See website for details.

AREAS OF INTEREST

- » Systems Security Work Focused on Advancements in Theory, Practice, & Education
- » Engineering of Safe, Secure, & Resilient Systems
- » Examples of Mission/Systems Assurance & Assurance Cases
- » Model Based Engineering Focused on Security, Safety, Trust, Resiliency
- » Affordable & Scalable Approaches to Hardware, Software, Firmware Assurance
- » Novel Architecture Design & Analysis Examples or Trade-Space Studies
- » Trust of Complex Systems with Emphasis on Cyber-Physical Systems
- » Security Considerations for Machine Learning / Artificial Intelligence
- » Large-Scale DevSecOps & Agile Approaches for System Development
- » Verification, Validation, & Evidences for Secure System Development
- » System Security Design Considerations for Cloud Environments
- » Extensions of Formal Methods to System-Level Evaluation
- » Cybersecurity in Manufacturing & Supply Chains
- » Case Studies to Include Automotive, Transportation, Space, & Others
- » Cyber-Physical System Event Detection, Investigation, Forensics, & Malware Analysis
- » Tailored Risk Management Approaches for Large Complex Systems
- » Attack/Defense Modeling, Simulation, & Characterization
- » Techniques for Cyber Risk Buy Down in Legacy Systems, Infrastructure, & Enterprises
- » Policy, Ethical, Legal, Privacy, Economic, & Social Issues

