Ground System Architectures Workshop





"Creating Smarter Ground Systems"

Call for Participation

Renaissance Los Angeles Airport Hotel **Feb. 25–28, 2019**

The 23rd annual Ground System Architectures Workshop (GSAW) provides a forum for the world's space-related ground system experts to collaborate with other ground system users, developers, and researchers through tutorials, presentations, working groups, panel discussions, and technical exhibits.

The capabilities of satellites, sensors, and computer systems have been growing at a phenomenal rate. With that growth comes a corresponding growth in data, complexity, and threats. This creates challenges in processing mission data and telemetry; predicting system behaviors; and operating securely all without overwhelming the operator or user. This year's theme, "Creating Smarter Ground Systems," spans the entire ground system life-cycle. The use of autonomy, intelligent/cognitive systems, and machine learning are some approaches to efficiently exploiting data, predicting and preventing anomalies, detecting intrusion, and optimizing performance. Innovative development processes, architectures, and acquisition strategies can lead to these smarter systems. Come share your ideas, emerging technologies, lessons learned, and roadmaps to achieving the goal of a smarter enterprise.

- Architecture modeling and model-based approaches
- Intelligent/cognitive systems, machine learning, and autonomy
- Cybersecurity and resilience
- Enterprise systems, reference architectures, and infrastructure
- Mission assurance and risk management
- Space-ground communications
- Service-based operations
- Situational awareness

- Data science, engineering, fusion, analytics, and exploitation
- Virtualization, containers, and cloud
- Mobile, lightweight, and geo-independent platforms
- Agile, DevOps, and rapid system development
- Interoperability, compatibility, and standards
- Creative business and acquisition models
- Cost, schedule, governance, and data rights

Participation Opportunities

Open Workshop: To be held at the hotel with an international audience. We are accepting abstracts for the following:

- **Plenary Presentations:** Present a 15-minute talk describing your work, progress, or case studies. Award for Best Presentation.
- Working Groups: Lead a four-hour collaborative discussion.
- **Tutorials:** Instruct a half- or full-day session.
- **Technical Exhibits**: Provide tabletop product literature and demonstrations to colleagues and customers.

Classified Session: To be held at The Aerospace Corporation on the afternoon of Feb. 28. We are accepting abstracts for plenary presentations only. All attendees will be required to have a TS/SCI clearance.

Proposal Instructions can be found at <u>http://gsaw.aero.org/cfp/guidelines/</u>

Deadlines

- Abstracts/proposals: Oct. 22, 2018
- Notification of acceptance: Nov. 26, 2018
- Accepted presentations: Jan. 28, 2019

Contact Info

Send **UNCLASSIFIED** submissions and questions to <u>gsaw@aero.org</u> or call 310.336.0454.

Send **CLASSIFIED** submissions and questions to <u>gsaw@aero.ctr.nro.ic.gov</u> or call 894.3985.

GSAW is sponsored by The Aerospace Corporation in cooperation with:

- Air Force Space Command
- Air Force Space and Missile Systems Center
- NASA/Jet Propulsion Laboratory, California Institute of Technology
- NASA Goddard Space Flight Center
- University of Southern California, Center for Systems and Software Engineering
- Software Engineering Institute
- Institute for Software Research, University of California, Irvine
- European Space Agency
- National Oceanic and Atmospheric Administration

Presenters are responsible for ensuring that all submissions are cleared for presentation to their respective audiences.

http://gsaw.aero.org/