

Ground System Architectures Workshop Opportunities in Data Exploitation

March 2–5, 2020 Renaissance Los Angeles Airport Hotel

CALL FOR PARTICIPATION

http://gsaw.aero.org/

This 24th annual Ground System Architectures Workshop (GSAW) provides a forum for the world's space-related ground system experts to collaborate with other users, developers, vendors, and researchers through interactive tutorials, presentations, working groups, panel discussions, and technical exhibits.

GSAW is looking for presentations on what works in all aspects of your current ground systems as well as your ideas, emerging technologies and roadmaps for the future. This year we are particularly interested in "Opportunities in Data Exploitation". As the capabilities of satellites, sensors, computing, and ground systems increase, there is considerable growth in data, complexity, and threats. Increased connectivity has contributed to an exponential increase in the amount of data. Unfortunately, valuable knowledge and insight is often lost because of the inability to process the sheer volume of mission data and telemetry. The good news is that there have been significant advances in data science, analytical methods, autonomy, and machine learning that have greatly advanced the ability to efficiently exploit data. This year we are looking to the ground system community to share their innovative approaches in predicting system behavior, preventing anomalies, detecting intrusion, and optimizing performance without overwhelming the operator or user. How do we get the right information to the right users at the right time in the right format?

Come share your experiences, leading-edge practices, lessons learned, and research in a range of ground system areas including:

- Data science, engineering, fusion, analytics, and exploitation
- Intelligent/cognitive systems, machine learning, and autonomy
- Architecture modeling and model-based approaches
- Cybersecurity and resilience
- Agile, DevOps, and rapid system development

- Enterprise systems, reference architectures, and infrastructure
- Mission assurance and risk
 management
- Space-ground communications
- Human factors, workload, and effectiveness
- Virtualization, containers, and the cloud

- Mobile, lightweight, and geoindependent platforms
- Interoperability, compatibility, and standards
- Creative business and acquisition models
- · Service-based operations
- Situational awareness
- Cost, schedule, governance, and data rights

GSAW is sponsored by The Aerospace Corporation in cooperation with:

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

Presenters are responsible for ensuring that all submissions are cleared for presentation.



Approved for public release. OTR 2019-00659.

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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 halfor 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 March 5. 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/</u>cfp/guidelines/

Deadlines

- Abstracts/proposals due: Oct. 21, 2019
- Notification of acceptance: Nov. 22, 2019
- Accepted presentations due: Feb. 3, 2020

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.</u> <u>ctr.nro.ic.gov</u> or call 894.3985.

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