## **Call for Papers**

The AIAA Computer Systems Technical Committee is sponsoring a Session

## AIAA SciTech 2026 Forum and Exposition

January 12-16, 2026 Orlando, FL

The **AIAA SciTech Forum** is the premier event for aerospace research and innovation, bringing together experts from academia, industry, and government. We invite submissions of original research papers addressing both theoretical and practical considerations related to **cyber**, **computer, computation, and information processing techniques** as they apply to aerospace systems and operations. Researchers are encouraged to present novel methodologies, cutting-edge technologies, and innovative solutions that enhance the efficiency, security, and reliability of aerospace computing. Topics of interest include artificial intelligence, cybersecurity, high-performance computing, embedded systems, and advanced data processing techniques tailored for aerospace applications. This forum provides a unique opportunity for professionals to showcase their work, engage in meaningful discussions, and contribute to shaping the future of aerospace technology.

Extended abstracts of no less than 1,000 words are due May 22, 2025 Author notification of paper acceptance on or about August 25, 2025 Final manuscript due December 2, 2025

Detailed deadline information, abstract preparation instructions, and policies can be found at:

https://www.aiaa.org/SciTech/call-for-content/call-for-papers

For more information, contact one of the following organizers:

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## **Call for Papers**

The committee welcomes submissions from government, industry, academic, and small businesses. All abstracts are peer-reviewed.

Topics of Interest Include, but Are Not Limited To:

- AI Processing Hardware for Aerospace Operations: Computer hardware supporting AI-driven ground systems for aerospace vehicle operation.
- Vision and Sensor Processing: Computer hardware enabling intelligent algorithms in vision systems and sensors.
- **Onboard AI Processing**: Hardware architectures for AI processing on aerospace vehicles, including UAVs, satellites, and space exploration systems.
- **Cybersecurity and Information Assurance**: Research on DoD cybersecurity frameworks, maturity models, and resilient aerospace cyber systems.
- Embedded and Energy-Efficient Computing: Low-power, high-efficiency computing solutions for aerospace applications.
- Formal Verification and System Validation: Boolean satisfiability, verification techniques for computer and cyber-physical systems.
- **High-Performance Computing (HPC)**: Advances in HPC architectures and applications for aerospace modeling and simulation.
- Secure and Fault-Tolerant Processing: Robust computing techniques for mission-critical aerospace applications.
- **Parallel, GPU, and Multicore Processing**: Innovations in processing architectures for aerospace applications.
- Other Topics in Computer Systems: Cutting-edge research in computational techniques relevant to aerospace.

**Note**: Authors submitting abstracts are strongly encouraged to review the extended abstract guidelines below. Non-conforming abstracts will be rejected during the review process.

## Guidelines for Submitting Extended Abstracts

To ensure high-quality technical papers, extended abstracts must adhere to the AIAA guidelines outlined below. Submissions that fail to meet these requirements will be rejected during the abstract review process.

https://www.aiaa.org/events-learning/events/Technical-Presenter-Resources