2024 Space & Missile Defense Symposium Technology Track
August 6-8, 2024 – Huntsville, AL
Please Consider Submitting an Abstract

Abstracts are due May 31, 2024 and final briefings are due July 14, 2024

Modeling & Simulation/Digital Engineering

Space and missile defense systems are crucial for safeguarding the United States and protecting our nation's security interests. There is a growing need for innovative modeling and simulation approaches to enhance the effectiveness and efficiency of these systems as technologies evolve.

Abstracts are encouraged that address: Advanced modeling techniques, simulation-based evaluation of missile defense strategies, multi-sensor fusion for enhanced threat detection, performance analysis and optimization of missile defense systems, missile threats, human factors and decision support in missile defense operations, validation and verification of missile defense models, and case studies and practical applications of missile defense simulation.

Artificial Intelligence in Space and Missile Defense

The rapid emergence of Artificial Intelligence (AI) and Machine Learning (ML) based methodologies offers a tremendous opportunity for the United States to maintain and extend our competitive edge in space and missile defense applications. Surveillance and reconnaissance, guidance and control, maintenance and health monitoring, cybersecurity, biomedical, among many other fields, may benefit greatly from and be transformed significantly by AI/ML in the near future. Advancing the nation's capabilities in AI/ML to ensure that solutions are robust, secure, and accurate is critical and depends on innovations in many key areas.

Abstracts are encouraged that address: Data Collection and Generation, Algorithms and Architectures, Testing, System Development, Cyber Resiliency, and other related topics, which discuss methods, technologies, and processes that facilitate development of novel AI/ML solutions or improve systems. Case studies involving validation and verification in simulated, benchtop, or real-world environments and methods to review new technologies are also desired.

Criteria & Submission

Selection for this Symposium is based on an **Abstract of no more than 2 pages** describing the proposed technical briefing. The Abstract must describe the basis of the work and include sufficient detail to allow evaluation of the work. No exceptions will be made. For those topics selected for presentation, a 20-minute PowerPoint briefing will be prepared and presented as part of the Symposium Technology Track. All Abstracts and PowerPoint briefings must be approved for Public Release. Authors will be notified of their selection status.

Prospective authors are asked to submit their work or questions electronically to justin.scharber@cfd-research.com prior to the posted deadlines.

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