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IEEE Military Communications Conference

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*C5I Technologies for Military and
Intelligence Operations Today and Tomorrow*

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CALL FOR PAPERS

milcom2024.ieee-milcom.org

IEEE MILCOM 2024 solicits technical papers and proposals for tutorials, workshops, and panels on current and emerging topics applicable to all facets of military communications. We encourage professionals in industry, academia, and government worldwide to contribute and participate. The general forum will be open to all participants and accepted papers will be published in IEEE Xplore. The Restricted Access Program will support Controlled Unclassified Information (CUI) materials in addition to a Classified Program for content up to Top Secret/Sensitive Compartmented Information (TS/SCI).

UNCLASSIFIED TECHNICAL PAPERS

The unclassified technical program provides a venue for papers and presentations that do not include ITAR-sensitive, CUI, classified, nor proprietary information. The following five tracks and topics have been established to submit papers:

[TRACK 1: Waveforms and Signal Processing](#) – Antennas & RF; Modulation & Coding; Interference Management; Spectrum Sharing and Coexistence; Cognitive and Software Defined Radio; 5G and beyond systems; Open RAN Concepts and Orchestration.

[TRACK 2: Networking Protocols and Performance](#) – Ad Hoc, Mesh, & Cooperative Networks; Mobile Edge Networks; Software-Defined Networking; Network Slicing and Virtualization; Information-Centric Networking; Network Science.

[TRACK 3: Cyber Security and Trusted Computing](#) – Cryptography; Key Management; Advanced Persistent Threat Detection & Mitigation; Tactical Cloud Security; Wireless Security; Multi-Level Security; Edge/Fog Computing and Networking; Zero Trust Network Security; Emerging Concepts.

[TRACK 4: Integrated Network Architecture and Systems-of-Systems](#) – Airborne Networks; Integrated UAV/Drone Networks; High Altitude Platform Systems; SATCOM and Space Networks; Multi and Cross Domain Operations; Coalition Operations.

[TRACK 5: Machine Learning \(ML\) for Communications and Networking](#) – ML for Channel Estimation, Decoding and Interference Mitigation; ML for Resource and Network optimization; ML at the Edge; Distributed and Federated Learning; Adversarial ML; Secure ML over Communication Networks; Generative AI for Synthetic Data Generation; Domain Generalization in ML models; Explainable AI.

RESTRICTED ACCESS AND CLASSIFIED PROGRAM

The [Restricted Access](#) and [Classified](#) technical programs provide avenues for papers, panels, and workshops that contain CUI or classified content, respectively. Attendance, participation, and paper authorship will be limited to US Citizens holding the appropriate levels of security clearance. Please refer to the IEEE MILCOM 2024 website for submission instructions.

PANELS, TUTORIALS, AND WORKSHOPS

IEEE MILCOM 2024 also solicits proposals for half-day [Tutorials](#), half-day or full-day [Workshops](#), and [Technical Panels](#) that will be part of the unclassified program. The conference workshops will emphasize focused mission and domain topics that are not specifically covered in the main tracks, facilitating a deeper discussion within a very specific domain. Panel topics sought include leading edge C5I technologies, military and coalition operations, C5I for intelligence activities, and commercial C5I for military use.

General Co-Chairs:

Hamid Hemmati – Viasat
Reggie Brothers – MIT Lincoln Laboratory

Technical Program Co-Chairs:

Dave Scher – MITRE
Tom Halford – Caliola

Unclassified Technical Program Co-Chairs:

Debashri Roy – University of Texas at Arlington
Sastry Kompella – Nexcepta