RadarConf'24
2024 IEEE RADAR CONFERENCE
May 6-10, 2024 // Hilton Denver City Center // Denver, Colorado

AESS | IEEE

The Peak of Radar Innovation

CALL FOR PAPERS

Aim & Scope

In 2024, the IEEE Radar Conference will be held in Denver, Colorado. With over 300 days of sunshine per year and situated at the foot of the Rocky Mountains, Denver features beautiful weather, outdoor activities, world-class museums and public art, performing arts complex, sporting events, and walkable shopping and dining destinations. The Denver area is home to offices of industry-relevant companies, major universities, the North American Aerospace Defense Command (NORAD), the US Air Force Academy (AFA), and the US Northern Command (NORTHCOM). Don't miss this exciting week filled with technical innovation and great adventure.

The Venue

The 2024 IEEE Radar Conference will be held at the Hilton Denver City Center. In addition to ample meeting space and conference amenities, the venue is within easy walking distance to the Larimer Square dining/shopping/entertainment district, Coors Field (baseball), the Denver Performing Arts Complex, and outdoor city parks. Red Rocks Park & Amphitheatre, Rocky Mountain National Park, and other outdoor adventure and hiking destinations are drivable within 30-90 minutes. Attendees will find myriad options for work, shopping, dining, exercise, relaxation, and wonder.

Call for Papers

Original papers describing significant advances in radar technologies, systems, applications, and techniques are sought. Prospective authors should prepare a 4-6 page full paper (including supporting figures) using the IEEE format. Papers should be submitted no later than 20 November 2023.

Particular topics of interest include, but are not limited to:

» Radar Signal & Data Processing: STAP & adaptive processing, MIMO, waveform & frequency agility / software-defined radar, sparsity-based techniques, SAR / ISAR processing, digital beamforming & array processing, super-resolution techniques, detection & false alarm improvements, target tracking & fusion, classification & identification, AI/ML techniques

» Radar Phenomenology: target & clutter modeling and estimation, atmospheric propagation & scattering phenomenology, foliage & ground penetration, multipath exploitation

» Radar Systems & Applications: innovative designs / missions for airborne, spaceborne & shipborne radar, imaging radar, distributed active & passive radar, air traffic radar, over-the-horizon radar, automotive radar, multi-function radar / RF, sense & avoid radar, weather radar, medical / biomedical sensing

» Antenna Technology: conformal / low-profile arrays, design for low sidelobe level, ultra wideband, metamaterials, multi-polarization, frequency-diverse arrays, dual / multi-band antennas & arrays, simultaneous multiple beams

» Subsystems and Components: novel & advanced processing architectures, processing & RF architectures for software-defined radar, RF system-on-chip (RFSoC) & other transceiver technologies, advanced components (e.g., GaN MMICs), real-time processing (e.g. FPGA, GPU, hybrid), T/R modules, advanced receiver designs, and simultaneous transmit / receive (STAR) architectures

» Emerging Radar Technologies: cooperative radar systems (scheduling, networking, fusion), cognitive radar, spectrum sharing & frequency agility, fully digital phased array radar, millimeter-wave / terahertz radar, application of AI/ML

DENVER
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