Call for Papers

Wireless Sensing & Mobile Computing

Track Co-Chairs

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Scope and Motivation

Wireless sensing and mobile computing are redefining how devices perceive environments and interact with humans. Advances in wireless sensing, mobile systems, and next-generation networks enable applications across healthcare, industrial IoT, urban infrastructure, and beyond. Recent breakthroughs in large language models (LLMs) and multimodal AI further expand the potential of wireless sensing, enabling context-aware, privacy-preserving, and edge-adaptive intelligence. This track seeks groundbreaking research tackling fundamental challenges and emerging applications at the intersection of wireless sensing, mobile systems, and AI.

Topics of Interest

Our track seeks original contributions in the following topical areas, including but not limited to:

1. Fundamentals of Wireless Sensing:
   - RF-based sensing (Wi-Fi, mmWave, RFID, UWB)
   - Acoustic/optical sensing for mobile devices
   - Low-power and energy-efficient sensing
2. AI/ML for Wireless & Mobile Systems:
   - Deep learning for signal processing in sensing
   - LLM-driven adaptive sensing & context awareness
   - TinyML for on-device intelligence
3. Next-Gen Communication & Sensing:
   - Integrated sensing and communication (ISAC)
   - Backscatter and ambient RF sensing
   - Reconfigurable intelligent surfaces (RIS)
4. Mobile & Edge Computing:
   - Edge intelligence for mobile applications
   - Privacy-preserving mobile/edge computing
   - LLM-assisted edge computing

Important Dates

Paper Submission: 2025-08-15   **Notification: 2025-10-01**

How to Submit a Paper

Each submission should include the authors' names, affiliations, an abstract, and 5–10 keywords. Papers are limited to 8 pages, including figures and references. Up to two additional pages may be included with an overlength charge. Full instructions on how to submit papers are provided on the IEEE ICPADS 2025 website: http://ieee-icpads.org.cn/CFP-research-paper.html