

## **CALL FOR PAPERS**

## WORKSHOP FOR COMPUTING & ADVANCED LOCALIZATION (WCAL) WILL BE CO-LOCATED WITH IPIN2025

The Workshop for Computing & Advanced Localization (WCAL) will be collocated with the 2025 IPIN conference. WCAL solicits submission of high-quality technical papers reporting original work not previously published, nor currently submitted for consideration elsewhere. Papers are submitted as Workshop paper: limited to 5-9 single-column CEUR-WS format pages (including references), for poster presentation. Please note submit papers outside of the page range. Manuscripts are submitted according to the instructions for authors. Papers undergo a single-blind review process by at least two reviewers. Accepted WCAL papers will be submitted to CEUR-WS.org, which is currently indexed by Scopus, Ei Compendex and DBLP. Note that proceedings will be submitted for publication in CEUR-WS.org, but the IPIN Conference cannot guarantee inclusion in their library or indexing. The conference emphasizes open science practices, which will be positively received during the review process.

## TOPICS OF INTEREST INCLUDE, BUT ARE NOT LIMITED TO

- Al-assisted localization (snapshot vs. recurrent) and sensor fusion (deep Kalman filter)
- Location awareness & context detection
- Augmented Reality & Virtual Reality applied to localization
- Benchmarking, assessment, evaluation, standards
- Data simulation & augmentation for Al-based systems
- Health & wellness applications
- Indoor maps, indoor geospatial data model, indoor mobile mapping & 3D building models
- Location-based services & applications
- Monitoring & modeling of human motion
- Indoor positioning, navigation & tracking methods
  - o Al-based systems o Wireless sensor or cellular networks-based positioning
  - o AoA-, TOA-, TOF-, TDOA-based localization
  - o Channel Impulse Responses
  - o Cooperative systems applied to localization
  - o Fingerprinting
  - o Hybrid IMU pedestrian navigation & foot mounted navigation
  - o (Visual) Inertial Odometry
  - o Magnetic field-based methods

- o Multipath Component Analysis & Tracking
- o Optical systems
- o Inertial & hybrid systems
- o Passive & active RFID, radar, device-free systems
- o Routing in indoor environments
- o RSSI (BLE & Wi-Fi) fingerprinting
- o (Visual) Simultaneous Localization & Mapping (SLAM)
- Sound and Ultrasound systems
- o 5G, 6G & UWB
- Privacy & security for ILS
- Satellite-based navigation
  - o High Sensitivity GNSS, Indoor GNSS, Pseudolites
  - o RTK GNSS with handheld devices
  - o Mitigation of GNSS errors when switching indoors
  - o Industrial metrology & geodetic systems, iGPS
- Smartphone-based positioning
- User requirements for location-based systems
- Wearable-based systems

The conference includes keynotes, tutorials & industry exhibitions

Workshop Program Committee Chairs: Lucie Klus, Tampere University, Finland; Guohao Zhang, The Hong Kong Polytechnic University, Hong Kong

## **IMPORTANT DATES**

Paper Submission: 13 July 2025 [Hard Deadline]

Notification of Papers Acceptance: 4 August 2025 Camera-ready submission: 15 August 2025 Please note that there will be no deadline extensions for WCAL. Conference webpage: ipin-conference.org/2025/

Submission page: softconf.com/p/ipin2025/

