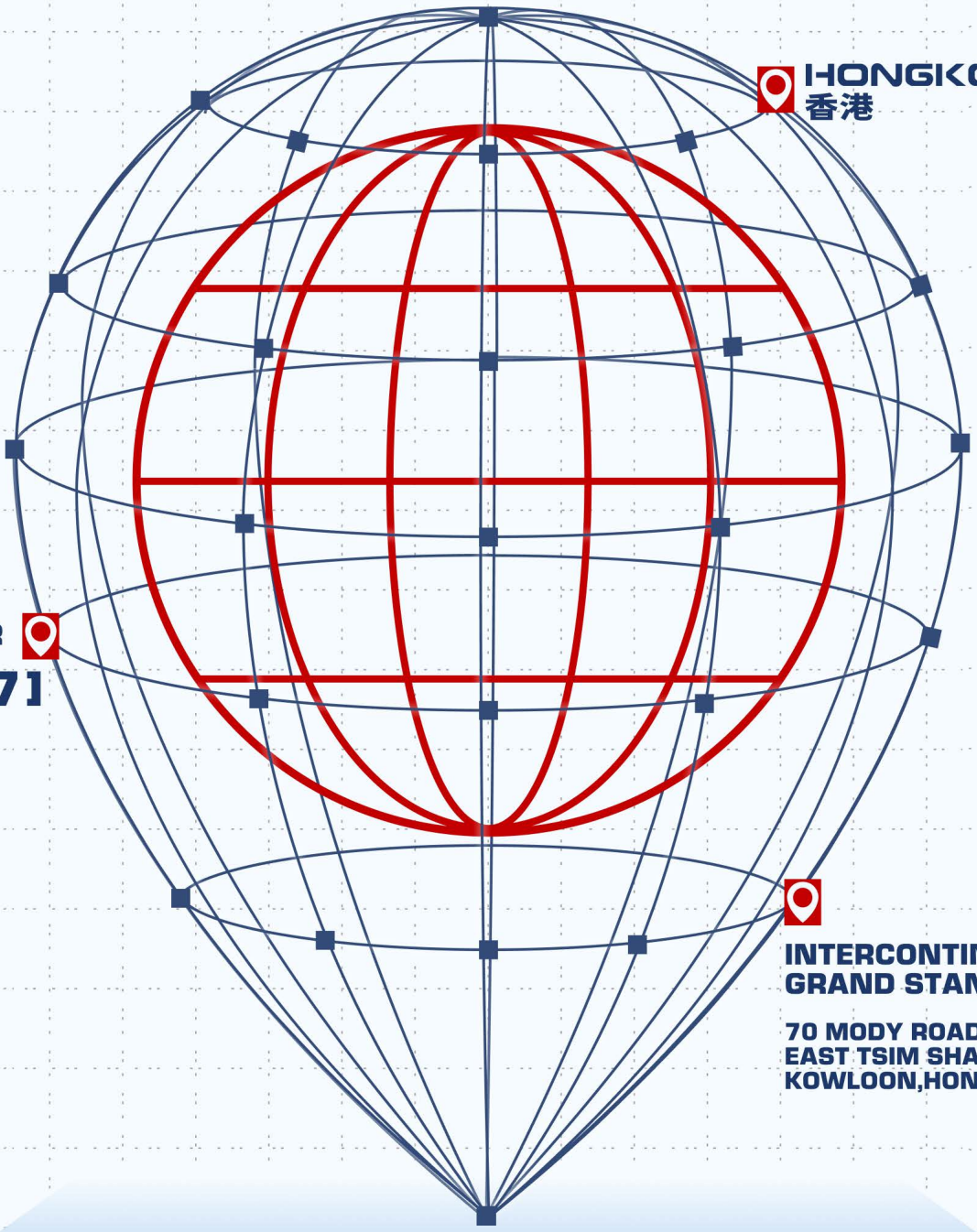
THE HONG KONG POLYTECHNIC UNIVERSITY
香港理工大學

Department of Aeronautical and Aviation Engineering
航空及民航工程學系

IPIN 2024

FOURTEENTH INTERNATIONAL CONFERENCE ON INDOOR POSITIONING AND INDOOR NAVIGATION



HONGKONG
香港

OCTOBER
[14-17]

INTERCONTINENTAL
GRAND STANFORD HK

70 MODY ROAD,
EAST TSIM SHA TSUI,
KOWLOON,HONGKONG

CALL FOR PAPER

Location information is critical to many emerging location-based applications in indoor environments. While GNSS technology dominates outdoors, no standard and straightforward solution yet exists indoors, i.e. accurate and economic enough for the mass market. First launched in 2010 in Zurich, Switzerland, Indoor Positioning and Indoor Navigation (IPIN) is a prestigious event dedicated to indoor localization, its applications, and its development. Over the years, IPIN has been an excellent global forum for researchers, developers, and service providers in indoor positioning and navigation, attracting experts from diverse disciplines, such as computer science, electronics, robotics, aerospace, and surveying, to address this challenge. The 14th edition of the IPIN Conference and the 11th IPIN Competition will be held in Hong Kong, China, an international and vibrant city where Eastern and Western cultures blend. IPIN solicits submissions of high-quality technical papers reporting original work not previously published, nor currently submitted for consideration elsewhere.

IPIN2024
HONGKONG
香港
14th INTERNATIONAL
CONFERENCE ON
INDOOR POSITIONING & INDOOR NAVIGATION

Regular Papers

Regular papers are limited to 6 IEEE format pages (including references), for oral presentation. Note that authors are encouraged to submit 6-page, original and unpublished full articles. After acceptance and successful revision, a final paper may be up to 8 pages long. However, please note that for papers longer than 6 pages, additional page fees (per page) will apply at the time of registration and final submission of the paper. Please do not submit any paper with more than 6 pages for initial review. Manuscripts are submitted according to the instructions for authors. Papers undergo a single-blind review process by at least two reviewers. Accepted regular papers will be submitted to IEEE Xplore Digital Library. Best papers are awarded during the conference. The winners of the best papers will be waived the APC for publication of extended versions of their papers in the IEEE Journal of Indoor and Seamless Positioning and Navigation (J-ISPIN) journal.

Work-in-Progress (WiP) Papers

WiP papers are limited to 5 to 8 single-column CEUR-WS format pages, for poster or oral presentation. Manuscripts are submitted according to the instructions for authors. Papers undergo a single-blind review process by at least two reviewers. Accepted WiP papers will be submitted to CEUR-WS.org, which is currently indexed by Scopus, Ei Compendex and DBLP.

Regular Paper Submission	3 June 2024
Reuglar Paper Notification Acceptance	8 July 2024
WiP Paper Submission	15 July 2024
WiP Paper Notification Acceptance	5 August 2024
Camera-ready Submission	21 August 2024
Conference Dates	14-17 October 2024

TOPICS OF INTEREST INCLUDE

- INDOOR MAPS AND BUILDING MODEL

- Indoor Spatial Data Model & Indoor Mobile Mapping
- Novel Uses of Maps & 3D Building Models
- Routing in Indoor Environments

- INDOOR POSITIONING, NAVIGATION AND TRACKING METHODS

- Passive & Active RFID
- Optical Systems
- Sound & Ultrasound systems
- UWB
- 5G, 6G
- Wi-Fi RTT
- BLE, LoRa
- AoA, TOF, TDOA-based localization
- Channel Impulse Responses
- Signal Strength Based Methods
- Multipath Component assisted Methods
- Magnetic field-based methods
- Vision-based methods
- Radar Systems
- Hybrid IMU Pedestrian Navigation & Foot Mounted Navigation
- Frameworks for Hybrid Positioning
- Sensor Fusion
- Fingerprinting
- Cooperative systems applied to localization

- GNSS AND INDOOR/OUTDOOR SEAMLESS NAVIGATION

- High Sensitivity GNSS, Indoor GNSS, Pseudolites
- RTK GNSS with handheld devices
- Mitigation of GNSS errors when switching indoors
- Industrial metrology & geodetic systems, iGPS

- ROBOTICS AND AUTONOMOUS SYSTEMS

- Mapping, Simultaneous Localization & Mapping (SLAM)
- (Visual) Inertial Odometry
- Visual-Based Indoor Navigation
- Surveillance Systems
- Computer Vision
- Indoor Autonomous Vehicle Navigation
- Indoor Intelligent Transportation Systems
- Robotic Autonomy for the Visually Impaired
- Domestic Robots
- Service Robots

- MOBILE COMPUTING

- Smartphone-based positioning
- Wearable & multi-sensor systems
- Self-contained sensors
- Localization, Algorithms for Wireless Sensor Networks

- AI AND DEEP LEARNING

- AI-based Positioning
- AI-assisted localization & sensor fusion
- Data simulation & augmentation for AI-based systems

- APPLICATIONS

- Location-based services and applications
- Health and wellness applications
- Applications of Location Awareness & Context Detection
- Augmented Reality & Virtual Reality

- OTHERS

- Human Motion Monitoring and modeling
- Benchmarking, assessment, evaluation, standards
- User requirements for location-based systems
- Privacy and Security for ILS
- Innovative Systems

CONTACT

The conference includes
competition, keynotes, tutorials & industry exhibitions.

www.ipin-conference.org/2024/

ipin2024.hk@polyu.edu.hk

PROGRAM COMMITTEE

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ORGANISED BY

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