

# The 23rd IEEE International Conference on Pervasive Intelligence and Computing (PICom 2025)

https://cyber-science.org/2025/picom/

2025 IEEE CyberSciTech / PICom / DASC / CBDCom Co-located Conferences (In-Presence/Virtual) Premier Hotel, Hakodate City, Hokkaido, Japan - October 21-24, 2025

#### **Honorary Chairs**

- Albert Zomaya, The University of Sydney (Australia)
- Ming Hou, Defence Research & Development Canada (Canada)
- Tiago Falk, University of Quebec (Canada)

#### **General Chairs**

- Flavia Delicato, Fluminense Federal University
- Antonio Guerrieri, ICAR-CNR (Italy)
- Kenichi Kourai, Kyushu Institute of Technology (Japan)

#### **General Executive Chairs**

- Bernady O. Apduhan, Kyushu Sangyo University (Japan)
- Xiaohong Jiang, Future University Hakodate (Japan)

#### **Advisory Chairs**

- Jinhua She, Tokyo University of Technology
- Paulo de Figueiredo Pires, Dell (Brazil)

### **Program Chairs**

- Claudio Miceli, Federal University of Rio de Janeiro (Brazil)
- Ao Guo, Nagoya University (Japan)
- Lidia Fotia, University of Salerno (Italy)

#### **Track Chairs**

- Federico Santoro, University of Catania (Italy)
- Marco Miozzo, CTTC (Spain)
- Claudio Savaglio, University of Calabria (Italy)
- Rebeca Motta, Universidade Federal Fluminense (Brazil)
- Andrea Vinci, ICAR-CNR (Italy)

# Workshop & Special Session Chairs

Irfanullah Khan, University of Glasgow (UK)

#### **Publicity Chairs**

- Sun Jingtao, Hitachi (Japan)
- Wei Li, The University of Sydney (Australia)
- Gwanggil Jeon, Incheon National University
- Antonino Galletta, University of Messina (Italy)
- Celimuge Wu, The University of Flectro-Communications (Japan)
- Endang Djuana, Universitas Trisakti (Indonesia)

## **Advisory Committee**

- Giancarlo Fortino, University of Calabria (Italy)
- Samee U. Khan, Mississippi State University
- Moayad Aloqaily, MBZUAI (UAE)
- Chuan-Yu Chang, National Yunlin University of Science and Technology (Taiwan)
- Nicolas Tsapatsoulis, Cyprus University of Technology (Cyprus)
- D. Frank Hsu, Fordham University (USA)
- Hui-huang Hsu, Tamkang University (Taiwan)

#### Steering Committee

- Jianhua Ma, Hosei University (Japan)
- Laurence T. Yang, St. Francis Xavier Univ. (Canada)
- Adnan Al-Anbuky, Auckland U Tech. (New
- Flavia Delicato, Fluminense Federal University (Brazil)

Over the last fifty years, computational intelligence has evolved from artificial intelligence, nature-inspired computing, and social-oriented technology to cyber-physical integrated ubiquitous intelligence towards Pervasive Intelligence (PI). The IEEE International Conference on Pervasive Intelligence and Computing is intended to cover all kinds of these intelligent paradigms as well as their applications in various pervasive computing domains. PICom 2025 is the conference on Pervasive Intelligence and Computing, previously held as PCC (Las Vegas, USA, 2003 and 2004), PSC (Las Vegas, USA, 2005), PCAC (Vienna, Austria, 2006, and Niagara Falls, Canada, 2007), IPC-2007 (Jeju, Korea, December 2007), IPC-2008 (Sydney, Australia, December 2008), and since 2009 as the name PICom. It aims to bring together computer scientists and engineers, providing a platform for vibrant discussions and exchanges on experimental and theoretical results, ongoing work, cutting-edge designs, and innovative test-environments or testbeds, while also delving into the latest advancements and novel trends in Intelligence and Machine Learning within the realms of Pervasive Intelligence and Computing.

#### **Tracks and Topics**

#### Track 1: Next Gen Pervasive Al

- GenAl for wireless sensing
- Machine-to-machine GenAl
- Generative IoT
- GenAl for semantic communications
- Multi-agent network powered by
- Big Data and Smart Data
- **Brain-inspired Computing**
- Mobile Data Mining
- **Ubiquitous Data Mining**

#### Track 2: Intelligent Networks, Middleware and Applications

- Pervasive Networks/Communications
- 5G networks and Technologies
- AI/ML for smart wireless networks
- Al and machine learning-based applications for ad hoc networks
- Cooperative and cognitive communication
- Middleware for the IoT
- Adaptive Middleware for Pervasive Systems
- Context-aware applications
- Intelligent/Smart IoT
- Programming Abstractions for IoT

#### **Track 3: Pervasive Computing and** Activity/Affect Recognition

- Crowdsourcing and Social Computing
- Collective Intelligence
- Agent-based Computing
- Pervasive Devices and RFIDs
- Wearable Devices and Applications
- Activity Recognition
- Intelligent Social Networking
- Pervasive Technologies for ITS
- **HCI for Pervasive Computing**

#### Track 5: Edge Intelligence applications

- ML for resource allocation at the Edge
- NFV-Edge
- 5G-Edge
- Edge-assisted IoT
- Integration of Edge Computing and Blockchain
- Edge-Cloud Continuum
- Edge Al

# Smart grid, healthcare, transportation (WiP) and Late Breaking

- applications Wearable and human-centric devices
- and networks **Device Virtualization**
- Intelligent Cloud Computing
- Services for Pervasive Computing
- **Smart Cities and Smart Homes**
- Privacy, Security and Trust in Smart Environments
- Autonomous Pervasive Systems
- Autonomous IoT
- **Digital Twins**

# Track 4: Next Gen Smart Environments Track 6: Work-in-Progress Innovation (LBI)

The track covers all the topics but it is aimed at either papers that have an original but not fully validated proposal (WiP) or present a breakthrough, a new vision or an out of the box idea on the field to be discussed at the conference (LBI)

## **Submission Instructions**

Authors are invited to submit their original research work that has not previously been submitted or published in any other venue. Regular, work-in-progress (WiP), and workshop/special session papers need to be submitted via EDAS (hlink available soon) in IEEE CS Proceedings format. IEEE formatting info:

http://www.ieee.org/conferences\_events/conferences/publishing/templates.html

All the accepted papers will be published by IEEE in the Conference Proceedings (IEEE-DL and EI indexed). Best Paper Awards will be presented to high quality papers. Selected papers will be recommended to prestigious journal Special Issues.

Some papers originally submitted as full papers can be accepted as short papers during the review process. In such cases, the authors will need to reduce the paper accordingly when preparing the camera-ready version. At least one of the authors of any accepted paper is requested to register and present the paper at the conference.

Full Papers: 6-8 pages - WiP/WS/SS/Short Papers: 4-6 pages - Late Breaking Innovation (LBI) Papers: 4-8 pages

# **Important Dates**

Workshop/Special Session Proposal Due: 20 May 2025 Regular Paper Due: 10 Jun 2025 WiP/WS/SS Paper Due: 20 Jun 2025 LBI Paper Due. 24 Jul 2025 Authors Notification:

Paper Registration Due: 05 Sep 2025 Camera-ready Submission: 12 Sep 2025 Supported by











