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IMPORTANT DATES

Workshop/SS Proposal Due: Nov. 10, 2019 Regular Paper Submission Due: Feb. 15, 2020 WiP/Wksp/SS/Poster Paper Due: Mar. 10, 2020 **Authors Notification:** April 1, 2020 **Camera-ready Submission:** May 10, 2020

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Computational Intelligence for Pervasive Systems

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-2020 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, to discuss and exchange experimental and theoretical results, work-in-progress, novel designs, and test-environments or test-beds in the important areas of Pervasive Intelligence and Computing.

IEEE PICom 2020 Tracks and Topics

Track 1: Computational Intelligence

- Deep Learning and Deep Computation
- **Brain-/Nature-inspired Computing**
- Machine Learning and Big/Smart Data
- \diamondsuit Agent-based Computing and DAI
- \diamond **Crowdsourcing and Social Computing**
- **Ubiquitous Data Mining and Fusion**
- Intelligent Privacy, Security and Trust

Track 3: Pervasive and Embedded Computing

- Pervasive Devices and RFIDs
- \diamondsuit Embedded Hardware, Software & System
- \diamond Sensors and Sensor Networks
- \diamondsuit Pervasive Networks/Communications
- \diamond Services for Pervasive Computing
- \diamond **HCI for Pervasive Computing**
- Statistical and Adaptive Signal Processing

Track 2: Intelligent Networks and IoT

- Intelligent Networking Technology
- Pervasive/Ubiquitous Intelligence
- \diamond **Intelligent Cyber-Physical Systems**
- \diamond Edge and Fog Computing
- \diamond Cloud of Things and Cloud of Sensors
- ♦ Intelligent/Smart IoT
- \diamond Semantic Analysis and Otology

Track 4: Intelligent Middleware and Apps

- Middleware for Pervasive Computing
- Autonomous System Management
- Device/Thing Abstraction & Virtualization \diamond \diamond AI@Edge/@Fog/@Cloud/@Blockchain
- \diamond Smart Homes, Grids, Systems and Cities
- \diamond Smart Manufacturing (Industry 4.0)
- Smart Healthcare and Transportation

Track 5: Activity Recognition and Ubiquitous Systems

- **Activity Data Sensing and Cleansing**
- Activity Detection and Recognition
- **Ubiquitous Human Interaction**
- Mobile/Wearable Computing
- **Ubiquitous Devices and Things**
- \diamond Context Modeling and Recognition
- **Ubiquitous Data Mining**
- **Ubiquitous Systems and Services**

IEEE PICom 2020 Calls for

- Workshop and Special Session Proposals, submitted to the wksp/ss chairs
- Regular conference paper: 6 8 pages, submitted to one of five tracks in EDAS system
- WiP/workshop/special session paper: 4-6 pages, and poster paper: 2-4 pages

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

More information in the conference website: http://cyber-science.org/2019/picom/

Three Co-located Conferences

- The 5th IEEE Cyber Science and Technology Congress (CyberSciTech 2020)
- The 18th IEEE Conf. on Dependable, Autonomic & Secure Comp (DASC 2020)
- The 6th IEEE Int'l Conf. on Cloud and Big Data Computing (CBDCom 2020)