

# The 21<sup>st</sup> IEEE International Conference on Ubiquitous Intelligence and Computing (UIC 2024)

Denarau Island, Fiji, December 2-7, 2024

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## Important Dates

<b>Workshop/SS Proposal Due:</b>	15 June 2024
<b>Regular Paper Due:</b>	15 August 2024
<b>WiP/Workshop/SS Paper Due:</b>	20 August 2024
<b>LBI Paper Due:</b>	31 August 2024
<b>Author Notification:</b>	15 September 2024
<b>Camera-ready and Registration:</b>	15 October 2024
<b>Conference Dates:</b>	2-7 December 2024

## Paper Submission

All papers need to be submitted electronically through the conference submission website (EDAS) in PDF format at <https://edas.info/N32625>

## Paper Publication

Accepted conference papers will be published by IEEE (IEEE-DL and EI indexed). At least one author of each accepted paper is required to register and present their work at the conference. Best paper awards will be presented at the conference. Selected high quality papers will be nominated to publish at high-level journal, after further extensions and revisions.

## Special Issues

- ACM Transactions on Intelligent Systems and Technology (IF: 7.2)
- IEEE Transactions on Computational Social Systems (IF: 4.5)
- Computer Communications (IF: 4.5)
- World Wide Web-Internet and Web Information Systems (IF: 2.7)
- IET Image Processing (IF: 2)

## Co-located with Five Conferences as IEEE Smart World Congress 2024:

IEEE ATC 2024/ IEEE DigitalTwin 2024/ IEEE Metaverse 2024/ IEEE PCDS 2024/ IEEE ScalCom 2024

IEEE UIC 2024 Website: <https://www.ieee-smart-world.org/2024/uic/>

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## Call for Papers

Ubiquitous sensors, devices, networks and information are paving the way towards a smart world in which computational intelligence is distributed throughout the physical environment to provide reliable and relevant services to people. This ubiquitous intelligence will change the computing landscape because it will enable new breeds of applications and systems to be developed and the realm of computing possibilities will be significantly extended. By enhancing everyday objects with intelligence, many tasks and processes could be simplified, more efficient and more enjoyable. Ubiquitous computing is to create such intelligent/smart environments, services and applications.

The 21st IEEE International Conference on Ubiquitous Intelligence and Computing (UIC 2024) will include a highly selective program of technical papers, accompanied by workshops, demos, panel discussions and keynote speeches. We welcome high quality papers that describe original and unpublished research advancing the state-of-the-art in ubiquitous intelligence and computing. Topics for submissions include but are not limited to the following theory, technology, and applications (such as intelligent traffic and transportation, intelligent environmental protection, smart healthcare and smart education, etc.).

## IEEE UIC 2024 Tracks and Topics

### Track 1: Pervasive & Ubiquitous Computing

- Mobile and Wearable Computing
- Cloud, Fog and Edge Computing
- Social and Crowd Computing
- Context-Aware Computing
- Urban Computing
- Parallel and Distributed Computing
- Cognitive Computing
- Federated Computing
- Affect/Personality/Mind Computing
- Ubiquitous Data Management and Mining
- Security, Privacy, and Trust
- Cyber-Physical-Social Systems

### Track 2: Sensing, Communication & Networks

- Embedded Devices and Software
- Wireless Sensing and Localization
- Internet of Smart Things
- Smart and Connected Vehicles
- Mobile Crowd Communication and Scouring
- On-Device Communication
- Green Communication Systems
- Ubiquitous Communication QoS, Reliability
- Signal Processing for Ubiquitous Communications
- Ubiquitous Networking
- Multi-Agent Network
- Smart Sensor Network

### Track 3: Human-Centred Design & Interaction

- Human-Centred Design and Sensing
- Human Mobility Modeling and Mining
- Human-Computer/Robot Interaction
- Human Interface and Management of Information
- Human-Like Perception
- Augmented Cognition
- Learning and Collaboration Social Network
- Personalization Recommendation Systems
- Personalized Search and Social Search
- Activity, Emotion, and Pattern Recognition
- Human Augmentation and Portable Environments
- Safety, Ethical and Legal Issues

### Track 4: AI, Robotics & Brain Informatics

- Machine learning and Big Data Intelligence
- Knowledge Representation and Reasoning
- Foundation Models for Ubiquitous Applications
- Virtual Personal Assistants and Cognitive Experts
- Virtual, Mixed and Augmented Reality
- LLMs for Ubiquitous Intelligence
- Hybrid Intelligence
- Computer Vision and Multimedia
- Nature-Inspired Intelligent Systems
- Intelligent Robotics and Automation Systems
- Novel Methodologies for Multi-Modal BMI
- Machine Learning in BMI Signal Processing

