



The Tenth International Conference on
Information, Intelligence, Systems and Applications (IISA
2019)

<http://iisa2019.upatras.gr>

TECHNOLOGICAL EDUCATIONAL INSTITUTE OF WESTERN GREECE
PATRAS, GREECE



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KEYNOTE SPEAKERS

Grigoris Antoniou, University of Huddersfield, UK
Jean-Baptiste Mouret, INRIA Nancy, France
Eleni Stroulia, University of Alberta, Canada

THE VENUE

IISA 2019 is locally organized by the **University of Patras** and the **University of the Peloponnese*** in Patras at the conference center of the University of the Peloponnese. Patras is located at the North-West of the Peloponnese and is the regional capital of Western Greece. It constitutes a bustling city, proud to host renowned scientific, academic and research communities in the fields of Science, Technology and Intelligent Systems.

IMPORTANT DATES

Invited session, workshop and tutorial proposals: **March 3, 2019**

Paper submission: **April 19, 2019**

Author notification: **May 20, 2019**

Camera-ready paper submission: **May 31, 2019**

INFORMATION CONTACT

iisa2019@unipi.gr

IISA-2019 is the tenth conference in the IISA series, technically co-sponsored by IEEE (approval pending), the **University of Piraeus**, the **University of Patras** and the **Technological Educational Institute of the Western Greece**. Conference content will be submitted for inclusion into IEEE Xplore. The conference is intended to become an international forum for researchers and professionals in all areas of Information, Intelligence, Systems and Applications. We invite submissions of papers presenting high-quality original research and developments for the conference tracks listed below. The conference will last for three days and will feature tutorials, technical paper presentations, workshops, and

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Information is widely available and accessible, but frequently leads to information overload and overexposure, while the effort for coding, storing, hiding, securing, transmitting and retrieving it may be excessive. **Intelligence** is required to manage information and extract knowledge from it, inspired by biological and other paradigms. **Multimedia Systems and Networks**, with an increasing level of Intelligence, are being developed that incorporate these advances. As a result, new **Technologies, Protocols and Applications** are emerging.

The International Conference on Information, Intelligence, Systems and Applications (IISA) series offers a forum for the constructive interaction and prolific exchange of ideas among scientists and practitioners from different research fields – such as computers, mathematics, physics, biology, medicine, chemistry, experimental psychology, social sciences, linguistics, and engineering – having the goal of developing methodologies and tools for the solution of complex problems in artificial intelligence, biology, neuroscience, security, monitoring, surveillance, healthcare, sustainability in energy sources, governance, education, commerce, automation, robotics, optimization, image, speech and natural languages, and their integration.

SCOPE: TOPICS OF INTEREST INCLUDE, BUT ARE NOT LIMITED TO:

Track I: Information Processing and Intelligence

- Advances in databases
- Information systems
- Information and data management
- Data mining and knowledge extraction
- Recommender systems
- Digital rights management
- Processing of Social and Emotional Interactions
- Biological and artificial neural networks
- Biological and artificial immune systems
- Cognitive science
- Neuroscience
- Computational biology
- DNA computing
- Evolutionary computing and genetic algorithms
- Bayesian networks
- Expert systems & intelligent agents
- Swarm intelligence
- Fuzzy logic systems
- Kernel methods - support vector machines
- Ensemble classifiers
- Emerging machine learning paradigms
- Decision making techniques
- Knowledge-based systems
- Ambient-ubiquitous intelligence
- Robotics and automation
- Affective computing

Track II: Multimedia Systems and Networks

- Advances in multimedia processing
- Signal mining
- Signal visualization
- Human-machine interaction
- Multimodal systems
- Multimedia systems
- Autonomous Computing
- Distributed computing
- Quantum computing
- Mobile computing
- Green computing

- Trusted computing
- Proactive computing
- Cloud computing
- Ubiquitous computing
- Networking
- Sensing, sensory systems and sensor networks
- Design and implementation
- Real time systems

Track III: Educational Informatics

- Adaptive and personalized learning
- Student modeling
- Intelligent tutoring systems
- E-learning and mobile learning
- Social media and learning
- Educational games
- Computer-supported collaborative learning
- Big data in education and learning analytics
- Smart learning environments
- Virtual and augmented reality in education
- Risk management in education
- Learning management systems
- Content management systems
- Learning technologies for students with special needs

Track IV: Cyber Security

- Watermarking, cryptography/analysis, steganography/analysis
- Privacy and authentication
- Malicious software analysis
- Information, computer and network security
- Infrastructure security
- Forensics
- Biometrics

Track V: Smart Energy and Smart Cities

- Assessment of the energy status in smart cities
- Intelligent sensors and data analytics for energy optimization

- Monitoring and control of energy resources
- Smart grid
- Fault detection
- Decision support systems in energy planning and scheduling
- Middleware for urban computing
- Intelligent transportation systems
- Public displays for modern cities
- Impact of urban computing in modern cities
- Case studies and best practices
- Big city data
- Culture for smart cities

Track VI: Healthcare

- E-health, mobile health and smart health
- Infrastructure for smart health
- Advanced devices and robotics for smart health
- Ambient intelligence in assisted living
- Health information systems
- Healthcare management
- Case studies

Track VII: Applications

- E-government and m-government
- E-commerce and m-commerce
- E-entertainment and m-entertainment
- E-legal and m-legal services
- Personalized systems and services
- Enabling technologies, frameworks and standards
- Empirical evaluations
- Simulation and evaluation via simulation
- Case studies
- Applications in culture and heritage
- Applications in tourism
- Applications in natural resource management
- Applications in disabilities and to people at need

