



IISA STEERING COMMITTEE

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THE VENUE

IISA2022 will be held on grounds of the Ionian University on the Greek island of Corfu. Corfu is the northernmost of the Ionian Islands in Greece. Located on the far northwest coast of the country, Corfu lies in the Adriatic sea, east of Italy and southwest of Albania. Historically, Corfu has been controlled by many foreign powers, notably the Venetians, the French, and the British. Corfu is often described as *magnificent* and is well known for its tradition in culture, natural landscapes and sunny beaches, historical and religious sites, and lively entertainment style.

IMPORTANT DATES

Invited sessions/workshop/tutorial proposals:

February 28, 2022

Paper submission: **March 28, 2022**

Author notification: **April 25, 2022**

Camera-ready paper submission: **May 16, 2022**

TREASURER

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INFORMATION CONTACT

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IISA2022 is the thirteenth conference in the IISA series, technically co-sponsored by IEEE, the University of Piraeus and Ionian University. IISA-2022 Proceedings will be published by IEEE and uploaded on IEEEEXPLORE. A small number of selected papers from IISA2022 will be invited for publication in extended form in a **special issue of the Intelligent Decision Technologies Journal, IOS Press**.

The IISA conference series has 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. **In IISA-2022, the Biological & Artificial Intelligence Foundation will give best student-paper awards.**

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 wearable 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

