

**IEEE International Conference on System Analysis & Intelligent Computing  
(SAIC-2022)  
Kyiv, Ukraine  
October 04 – 07, 2022**

**CALL FOR PAPERS**

The IEEE International Conference on System Analysis & Intelligent Computing (SAIC) is organized with support of IEEE Ukrainian Section. You are welcome to submit papers and take part in the IEEE SAIC-2022!

**IMPORTANT DATES**

Paper Submission: **March 31, 2022**  
Tutorial Request: **March 31, 2022**  
Paper Acceptance Notification: **September 01, 2022**  
Final Paper Submission: **September 30, 2022**

**REGISTRATION FEES**

**for International participants:**

**IEEE Member – 40 EUR**

**Non-IEEE Member – 50 EUR**

**Student IEEE Member – 20 EUR**

**Student Non-IEEE Member – 25 EUR**

**from Ukraine and CIS countries:**

**IEEE Members – 10 EUR**

**Non-IEEE Members – 15 EUR**

**Student IEEE Member – 5 EUR**

**Student Non-IEEE Member – 10 EUR**

Registration fees may change depending on the conference format.

**CONTACTS**

Website: <http://saic.ieee.org.ua>

E-mail: [saic@ieee.org.ua](mailto:saic@ieee.org.ua)

**CONFERENCE TOPICS**

**Track 1. System Analysis of Complex Systems (AMCS)**

1. Methods, models and technologies of system analysis of complex processes of different nature in conditions of uncertainty and risks
2. System methodology of foresight in the tasks of planning and making strategic decisions
3. Problem-oriented methods of analysis, diagnostics, safety and security of complex systems in conditions of uncertainty and risks
4. Cyber-physical systems and control
5. Methods and models for Internet of Things
6. Nonlinear problems of system analysis
7. Cognitive modelling of complex systems

**Track 2. Methods, Tools, and Applications of Systems Mathematics (MTASM)**

1. Mathematics for systems analytics: fundamentals, methods, and challenges
2. Machine learning (ML) methods for big data processing of dissipative dynamical systems' long-time behavior
3. System mathematics and ML methods
4. Synthesis of Neuro-Linguistic Programming (NLP) and Reinforcement Learning (RL) methods for the real time decision making
5. Hierarchical reinforcement learning for navigation problems
6. Performance optimization for business-critical systems
7. Variational approach for the satellite image processing

**Track 3. Computational Intelligence (CI)**

1. Fuzzy logic systems, fuzzy neural networks and applications
2. Neural networks, deep learning neural networks
3. Machine learning and self-learning
4. Convolutional neural networks
5. Intelligent decision-making systems
6. Genetic algorithms and evolutionary modeling
7. Particle swarm optimization and ant colonies algorithms
8. Pattern recognition, image processing, automatic speech recognition.
9. Hybrid systems of computational intelligence
10. Medical image processing, recognition and diagnostics with application of intelligent methods

**Track 4. Intelligent Computing Technologies (ICT)**

1. Distributed and parallel systems
2. Cloud Computing (IaaS, PaaS, SaaS, DaaS)
3. Grid and Mobile Computing
4. Service-oriented computing (SOC)
5. Semantic Web Services and Performance
6. Sensing and Sensor Networks
7. Agents and Multi-agent Systems
8. Smart Healthcare and Medical Diagnosis
9. Augmented and Virtual Reality
10. Blockchain and Serverless Computing
11. Brain-Machine Interface

**Track 5. Data Mining for Complex Socio-Economic Processes and Systems (DMCSEPS)**

1. Analyzing, modelling and forecasting of the socio-economic trends, systems and processes
2. Mathematical models and methods of technical and fundamental analysis of financial markets
3. Data mining methods for stock-market exchange scenarios
4. Methods, models and tools for financial risks management
5. Decision making in business and finance management
6. Data Mining in Marketing Analytics
7. Scenario planning of complex socio-economic processes and systems