

# 4<sup>th</sup> International Conference on Advances in Signal Processing and Artificial Intelligence (ASPai' 2022)

**ASPai**  
CORFU • 2022

19-21 October 2022 ● Corfu, Greece

<https://aspai-conference.com/>

Advances in artificial intelligence (AI) and signal processing are driving the growth of the artificial intelligence market by two major factors: emerging AI technologies and intelligent signal processing. Today, more and more sensor manufacturers are using machine learning to sensors and signal data for analyses. However, the increased number of sensors in devices will inherently generate higher data throughput, which poses a serious challenge in managing and processing the tremendous amount of sensory information. Furthermore, traditional processing techniques in conventional sensing devices are no longer suitable for systematically labeling, processing, and analyzing the exuberant amount of information.

The global artificial intelligence market size was valued at US \$ 93.5 billion in 2021 and is projected to expand at a compound annual growth rate (CAGR) of 38.1% from 2022 to 2030. Revenue forecast in 2030 is USD \$1,811.8 billion.

The global AI market growth is driven by increasing adoption of cloud-based applications and services growing big data increasing demand for intelligent virtual assistants advances in signal processing. The major restraint for such market is the limited number of AI technology experts. Today, there are approximately 300,000 AI researchers and practitioners worldwide, but the market demand is around millions of roles.

The series of ASPai conferences have been launched to fill-in this gap and provide a forum for open discussion and development of emerging artificial intelligence and appropriate signal processing technologies focused on real-world implementations by offering Hardware, Software, Services, Technology. The goal of the conference is to provide an interactive environment for establishing collaboration, exchanging ideas, and facilitating discussion between researchers, manufacturers and users.

## The topics of interest include (but not limited):

### Artificial Intelligence:

- AI Algorithms
- Intelligent System Architectures
- Hybrid Intelligent Systems
- Artificial Neural Networks
- Expert Systems
- Intelligent Networks
- Parallel Processing
- Pattern Recognition
- Pervasive Computing and Ambient Intelligence
- Programming Languages Artificial Intelligence
- Soft Computing and Applications
- Artificial Intelligence Tools & Applications
- CAD Design & Testing
- Computer Vision and Speech Recognition
- Fuzzy Logic, Systems and learning
- Computational Theories, Learning and Intelligence
- Computational Neuroscience
- Soft Computing Theory and Applications
- Software & Hardware Architectures
- Web Intelligence Applications & Search
- Ambient Intelligence
- Artificial Immune Systems
- Autonomous and Ubiquitous Computing
- Bayesian Models and networks
- Data Fusion
- Distributed AI
- Machine Learning
- Deep Learning
- Learning and Adaptive Sensor Fusion
- Multisensor Data Fusion Based on Neural and Fuzzy Techniques
- Applied Artificial Intelligence
- Self-Organising Networks

### Signal Processing:

- Signal Processing Theory and Methods
- Sensor Array and Multichannel Signal Processing
- Multivariable Sensor Systems
- Digital Signal Processing
- Image and Video Processing
- Multichannel Signal Processing
- Biomedical Signal Processing
- Biometrics
- Chaotic and Fractal Systems
- Computer Vision and Pattern Recognition
- Image and Video Processing
- Information Theory and Coding
- Speech Signal Processing
- Signal Processing for Communications and Networking
- Radar and Sonar Signal Processing
- Satellite Signal Processing
- Nonlinear Signal Processing
- Statistical Signal Processing
- Signal Processing for Internet of Things
- Coding
- Wavelet Transformation
- Theory and Application of Filtering
- Spectral Analyze

### Deadlines:

Submission (2-page abstract): **1 July 2022**  
Notification of acceptance: **20 July 2022**  
Registration: **30 August 2022**  
Camera ready (4-6 pages paper): **20 September 2022**



## Contribution Types:

- Keynote presentations
- Invited presentations
- Special sessions papers
- Regular papers
- Posters
- Industrial presentations
- Panel discussions and Round Tables
- Exhibition

## One event - three different publications !

1. All registered abstracts will be published in the conference proceedings (Flash drive edition of published Proceedings with the ISBN). The conference proceedings will be submitted for indexing in the Web of Science.
2. Authors will be invited to submit full-page extended papers to one of special journals' issues, which are published in both formats: print and electronic:
  - Sensors & Transducers (ISSN 2306-8515, e-ISSN 1726-5479) by IFSA Publishing
  - Integrated Computer-Aided Engineering (ISSN: 1069-2509, e-ISSN: 1875-8835) by IOS Press
  - International Journal of Neural Systems (ISSN: 0129-0657, e-ISSN: 1793-6462) by World Scientific
3. The limited number of full-page papers published in the Sensors & Transducers journal will be selected by the Editorial Board to extend for open access books' chapters for the Book Series on 'Advances in Signal Processing: Reviews', Vol. 3 or 'Advances in Artificial Intelligence: Reviews', Vol. 2, which will be published by IFSA Publishing in 2023.

## Special Sessions:

Authors are welcome to propose and manage special sessions during the ASPAI' 2022 conference. Each special session will contain 4-6 papers in a related field as specified above. Session organizers will get:

- Certificate of Appreciation
- Free Registration
- Special Publishing Theme within Conference Proceedings

### Chairman:

Prof., Dr. Sergey Y. Yurish (IFSA, Spain)  
e-mail: [aspai@sensorsportal.com](mailto:aspai@sensorsportal.com)

### Advisory Chairman:

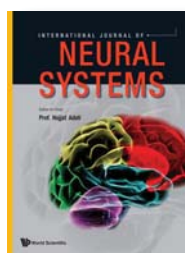
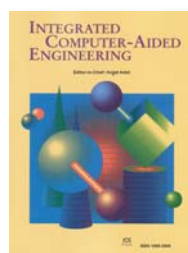
Prof., Dr. Hojjat Adeli (The Ohio State University, USA)

### Steering Committee:

Dr. Mobyen Uddin Ahmed (Mälardalen University, Sweden)  
Dr. Sergey Grosman (Siemens PPAL, Germany)  
Prof. Svetlana V. Prokopchina (Financial University, Russia)  
Prof. Valery B. Tarassov (Bauman Moscow State Technical University, Russia)  
Prof. Sandeep Singh Sengar (Cardiff Metropolitan University, UK)

### Conference Manager:

Mrs. Tetyana Zakharchenko (IFSA Publishing, S.L., Spain)



## Social Programme

**Welcome Cocktail.** 18 October 2022 (20:00-21:30). The Welcome Cocktail will take place in the Corfu Holiday Palace Hotel. Do not miss this opportunity to say the first "Hello" to attendees and committee members. The Registration will be opened at the Welcome Cocktail area.

**Gala Dinner.** 20 October 2022 (20:00-23:00). The Gala Dinner will take place in the Corfu Holiday Palace event hotel, Nausica Ballroom.

