

# IEEE COINS 2023

## IEEE International Conference on Omni-layer Intelligent Systems

IEEE | IEEE RAS | IEEE CEDA | IEEE COMPUTER SOCIETY | VSA-TC & NOAS TC IEEE CAS | E-HEALTH-TC IEEE COMSOC | CONTROL, ROBOTICS, AND MECHATRONICS TC & CLOUD AND WIRELESS SYSTEMS FOR INDUSTRIAL APPLICATIONS TC IEEE IES | IEEE IOT

Berlin, Germany | Hybrid

July 23-25, 2023

<https://coinsconf.com>



Call for  
Papers

## Track: Artificial Intelligence, Machine Learning, and Analytics

This track aims to provide a forum for the exchange of ideas and discussions on the topic of Artificial Intelligence, Machine Learning, and Analytics. This tracks gather problems, algorithms, modern architectures as well as current and future challenges in this topic. The track is therefore open to high quality submissions from researchers working in learning problems using different methodologies on multiple data sources.

Topics of interest of this track include, but are not limited to, the following:

### A) Artificial intelligent and Machine learning Fundamentals

Machine learning, artificial intelligence, and predictive analytics  
Platforms, architecture and infrastructure for efficient data analytics  
Data, Text, Stream, Process & Network Mining  
Times Series Models  
Bayesian Learning  
Ensemble Learning  
Transfer Learning  
Reinforcement Learning  
RNN, CNN & GAN  
Markov-Chain & Monte-Carlo-Simulation  
Datasets and Evaluation  
Adaptive Systems  
Generalization as search  
Ontologies and Knowledge sharing  
Brain-inspired representations learning  
Business Intelligence and Data Mining techniques  
Intelligent algorithms for Fog and cloud-based Internet of Things

### B) Image Processing and Video Analytics

3D computer vision  
Action and behavior recognition  
Biometrics, face, gesture, body pose  
Image retrieval  
Motion and tracking  
Neural generative models, auto encoders, GANs  
Recognition (object detection, categorization)  
Representation learning, deep learning  
Scene analysis and understanding  
Segmentation, grouping and shape  
Transfer, low-shot, semi- and un- supervised learning  
Video analysis and understanding  
Vision + language, vision + other modalities  
Vision applications and systems  
Visual reasoning and logical representation

### C) Speech Recognition and Understanding

Automatic speech recognition  
Spoken language understanding  
Speech-to-text systems  
Spoken dialog systems  
Multilingual language processing  
Robustness in automatic speech recognition  
Spoken document retrieval  
Speech-to-speech translation  
Text-to-speech systems  
Spontaneous speech processing  
Speech summarization  
New applications of automatic speech recognition

### Special Track Co-Chairs

Jose Maria Luna, University of Cordoba, Spain

### Special Track Program Committee

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