# IEEE COINS 2021 IEEE International Conference on Omni-layer Intelligent Systems

IEEE | IEEE RAS | IEEE CEDA | IEEE COMPUTER SOCIETY | VSA-TC IEEE CAS | E-HEALTH-TC IEEE COMSOC | TC-ICPS IEEE IES | IEEE IOT

<u>Hybrid Event:</u>
(On-site In-person Presentation & Virtual Presentation)

Barcelona, Spain August 23-25, 2021



Call for Papers

## **Track: Artificial Intelligence and Machine Learning**

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: analysis, modelling, simulation, and application in different domains

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

Natural Language Processing

Image processing and Video Analytics

### B) Image Processing and Video Analytics

3D computer vision

Action and behavior recognition

Biometrics, face, gesture, body pose

Image retriev al

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, vision for robotics and

autonomous vehicles

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