Call for Papers

Track: Artificial Intelligence, Machine Learning, and Cognitive Computing

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, autoencoders, GANs
Recognition (object detection, categorization)
Representation learning, deep learning
Scene analysis and understanding
Segmentation, grouping and shape
Transfer, low-shot, semi- and unsupervised 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