

ICL Special Session Proposal Template

Title

Advances in Machine and Technology Enhanced Learning

Acronym

AMTEL

Overview

Machine learning is considered as a subset of Artificial Intelligence (AI) that helps learning from all previous data for making intelligent decisions. *Machine learning is now a time-honored approach to generalize conclusions from a dataset, where many features of the population of interest are considered simultaneously. AMTEL will provide an excellent international forum for sharing knowledge and results in theory, methodology and applications of Machine & Technology Enhanced Learning. This session seeks significant contributions to all major fields of the Machine Learning in theoretical and practical aspects. The aim is to provide a platform to the researchers and practitioners from both academia and industry to meet and share cutting-edge development in the field.*

Authors are solicited to contribute by submitting articles that illustrate research results, projects, surveying works and industrial experiences.

Topics

Topics of interest include (but are not limited to):

- *General Machine Learning (active learning, clustering, online learning, ranking, reinforcement learning, supervised, semi- and self-supervised learning, time series analysis, etc.)*
- *Deep Learning (architectures, generative models, deep reinforcement learning, etc.)*
- *Learning Theory (bandits, game theory, statistical learning theory, etc.)*
- *Optimization (convex and non-convex optimization, matrix/tensor methods, stochastic, online, non-smooth, composite, etc.)*
- *Probabilistic Inference (Bayesian methods, graphical models, Monte Carlo methods, etc.)*

ICL2022

„Learning in the Age of Digital and Green Transition“

Hilton Park Vienna, Austria, 27–30 September 2022

- *Trustworthy Machine Learning (accountability, causality, fairness, privacy, robustness, etc.)*
- *Applications (computational biology, crowdsourcing, healthcare, neuroscience, social good, climate science, etc.).*
- Various machine learning algorithms and techniques, such as decision-making algorithms and techniques

Program Committee

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