

Machine learning Lab

This lab is a centralized hub for development teams to seamlessly build, deploy, and operate machine learning solutions at scale. It is designed to cover the end-to-end machine learning lifecycle from data processing and experimentation to model training and deployment. Machine Learning is a science that enables machines (especially computers) to learn from environments and make their own decisions.

In our Machine Learning Laboratory (MLL) we carry out research and develop different theoretical foundations for machine learning such as:

- Reinforcement Learning, Deep Learning, Statistical Learning Theory, Multi-agent Systems, Game Theory, and Mechanism Design, Blockchains, Explainable and Fair AI.
- How machines and multi-agent systems should help in planning activities by learning from environments.
- How learning gets affected if different machine learning and multi-agent systems algorithms are trying to compete instead of cooperating.
- How machines should learn in the presence of a noisy environment or with partial supervision.
- Role of deep learning in planning, reinforcement learning, AI in game theory, blockchains and their applications.

Software available in lab:

- 1. Visual Studio Code
- 2. Anaconda Python
- 3. PyTorch
- 4. Tensorflow