LLM-Driven Development for Machine Learning

Schedule: 01/06/2025 - 30/07/2025

Level Up

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Our team

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Training topics

The following training topics will be covered:

- Explaining Machine Learning Models
- Artificial Dataset Generation
- Feature Engineering
- Pipeline Templates
- Model Selection
- Experiment Tracking
- Deployment with AWS

Learning outcomes

By the end of this course, participants will be able to:

- Collaborate with LLMs (e.g., Claude) to streamline the machine learning workflow, from data preparation to deployment.
- Explain machine learning model behavior using techniques supported and enhanced by LLM interaction.
- Generate artificial datasets for training and evaluation purposes, guided by prompts and LLM-based tooling.
- Apply effective feature engineering strategies in combination with LLM assistance to improve model performance.
- Design and implement reusable ML pipeline templates, incorporating automation through LLM-guided code generation.
- Select appropriate machine learning models using both empirical testing and LLM-suggested strategies.
- Track and manage experiments effectively using modern tools and workflows, with support from LLMs for documentation and comparison.
- Deploy machine learning models on AWS, utilizing LLMs to assist in infrastructure setup, configuration, and deployment scripting.
- Critically assess the strengths and limitations of using LLMs in machine learning development, including ethical and practical considerations

Participant profile

This course is addressed to postgraduates and professionals who are proficient in Python and have prior exposure to machine learning. It is suitable for individuals with backgrounds in computer science, data science, engineering, or related fields who wish to enhance their workflow by integrating large language models into the machine learning development process.

Other information

- Language: Greek
- Mode of study: Asynchronous
- Starting Date: June 1st,2025
- Duration: 25 hours
- Prerequisites: -

Thank you!

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