

Name:

**Yordan Grigorov**

## **Certificate of completion of Chaos Camp 2024 / Vol. 2**

Machine Learning

**16 hours**

- Introduction to Machine Learning: Overview of AI and Machine Learning; Types of Generative Models; Applications of Generative AI; Practice.
- Introduction to PyTorch: Tensors, Variables, and Operations; Notebooks; Building a Simple Model in PyTorch.
- Deep Dive into PyTorch: Advanced PyTorch Concepts; Building Complex Models in PyTorch; PyTorch Model Training and Evaluation.
- Introduction to LLMs: GPT / ChatGPT; Prompt engineering, LLMs for problem solving; Using the OpenAI API, functions, costs; Practice.
- Introduction to MLOps: Vertex AI pipelines; MLFlow; Connecting Vertex AI pipeline to MLFlow; Practice.
- ML for Computer Vision: Image classification, segmentation and object detection; Diffusion models; Practice.
- Hands-on Project: Custom Model Training and Fine-tuning. Project Presentation and Course Wrap-up.

**Assistant Professor Filip Andonov**  
Mentor, Machine Learning

**Date:** February 2025