



CV

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LinkedIn

<https://www.linkedin.com/in/pavlos-adamakis-101071217/>

Github

<https://github.com/PavlosAdamakis>

Professional Website

<https://portfolio-pavlos-projects-290e78cf.vercel.app/>

Salesforce

<https://shorturl.at/jqiOk>

About me

I am 25 years old from Greece and live together with my Danish girlfriend.

In my spare time, I enjoy playing chess, spearfishing, or playing computer games

Professional Skills

Programming: Python, C++, SQL

Machine Learning & AI: TensorFlow, Pytorch, Hugging Face, Scikit-learn, MLflow, LLM's, DataBricks, MLOps

Robotics & Simulation: ROS, ROS2, Gazebo, AirSim, RViz, Embedded Systems, Arduino

DevOps & Data: Docker, Git, DVC, Azure, Google Cloud, Kubernetes, Power BI, CI/CD

Personal Skills

Proactive
Solution-oriented, Problem-solver
Fast Learner
Team player and Independent
Great Communication
Analytical Approach

PAVLOS ADAMAKIS

Driven, quick to learn, and proud to contribute to team success.

I have a Master of Science (MSc) in Autonomous Systems with a specialization in Machine Learning and Data. My experience includes applying AI to real-world systems with recognition-based algorithms describing autonomous agents, data pipelines, and decisions.

Through relevant projects during my studies, I have gained experience in reinforcement learning, MLOps, and SQL, including data extraction and ML model development with TensorFlow, PyTorch, MLflow and Azure. I work really well in dynamic work, where I contribute with a proactive mindset, strong communication, and collaborative problem-solving skills. I have completed the 1st module of Danish and will continue to learn.

EDUCATION

MSc Eng. Autonomous Systems at Technical University of Denmark, DK

Sep. 2022 – Mar. 2025

- **Master's Thesis (ML, Python, TensorFlow, PyTorch, Unreal Engine, Airsim)**
Deep Reinforcement Learning in UAVs for Wind Turbine Blade Inspection.
- **Selected courses in AI & Machine Learning (Python, ML, Data, Git, CI/CD)**
Covered deep learning, MLOps, and artificial intelligence. Projects involved coding and managing complex systems requiring version control, data pipeline orchestration, and collaborative development practices.
- **Selected courses in Autonomous Systems & Robotics (Control Systems, Path planning, Robotics)**
Focused on intelligent and unmanned autonomous systems, robotics, and microcontroller programming, with emphasis on both software and embedded hardware applications.
- **Selected courses in Software Engineering for Autonomous Systems (C++, ROS, system architecture)**
I worked with software frameworks for building dependable autonomous systems using ROS and C++. I learned how to design safe and reliable robot systems with a structured software architecture approach.

BSc Eng. Mechanical Engineering with Robotics at University of Sussex, UK

Sep. 2018 – Jul. 2021

- **Selected courses in Core Engineering Foundations (Circuits, Mechanics, Programming)**
Completed courses concerning electrical circuits, advanced mathematics, electromechanics, programming, and thermodynamics, providing a strong foundation in both theoretical and applied engineering principles.
- **Selected courses in Robotics & Automation Focus (Embedded Systems, Control, Mechatronics)**
Specialized in robotics and automation with projects in embedded control and real-time systems. Projects included hands-on work with automation systems and real-time control applications.

EXPERIENCE

Assistant Mechanical Engineer at ELECTOR S.A., GR

Jun. 2020 – Sep. 2020

- **Waste Management, Global Company**
Assisted mechanical engineering head using CAD and PLC tools to support waste management system design and actuator integration in a pilot urban sustainability project.

Software Skills

Machine Learning - Proficient
Python - Proficient
Cloud Platforms- Intermediate - Proficient
C++ - Intermediate
React - Intermediate
ROS/ROS2 - Intermediate
SQL- Intermediate
JavaScript - Beginner

Languages

English - Native proficiency
Greek - Native proficiency
Danish - Beginner (M1 course, continuing to learn)

Certificates: (LinkedIn and Microsoft)

What is Generative AI?
Generative AI working with LLM
Machine Learning with Python Foundations
Microsoft Azure AI Essentials Professional
Model Context Protocol (MCP): Hands-On with Agentic AI

Assistant (Internship) at Kostis Hippocrates, GR

Jun. 2019 – Mar. 2020

- **Independent Civil Engineer**
Monitored civil engineering projects, drafting and simulating designs using ANSYS and SolidWorks.

Part-time Bartender at Bootleggers, DK

Nov. 2022 – Present

- **Bartender**
Throughout my studies in Denmark and to this day still, I work as a part-time bartender, where I have developed strong communication and teamwork skills by engaging with diverse and demanding customers in a high-pressure work environment. This has enhanced my skills in adaptability and a strong work ethic.

UNIVERSITY PROJECTS

Thesis Projects:

- **Master's Thesis (12)** Sep. 2024 – Mar. 2025
Designed and implemented a deep reinforcement learning system for UAV-based wind turbine blade inspection. Simulated realistic, dark, confined spaces in Unreal Engine via Microsoft AirSim. Developed and trained RL agents in Python (TensorFlow), comparing PPO, DQN, and REINFORCE algorithms on flight smoothness, reward optimization, and path efficiency. bit.ly/4i7nJt7.
- **Bachelor's Thesis (7)** Sep. 2020 – May 2021
Design and development of an Autonomous Mapping Planar for a Rover. I developed a motion planning and control system for a 6-wheeled rover using ROS and Arduino. The system enabled autonomous navigation in unknown environments while generating a map for research applications. The rover's data was visualized in SLAM, RViz, and Gazebo.

Agentic AI MCP

- **Agentic AI with Model Content Protocol (MCP)**
Designed and implemented an AI assistant using the MCP architecture to handle natural language requests and delegate them to structured agents (OpsAgent, WeatherAgent, ExcelAgent). Integrated tools like OpenWeatherMap, Excel automation, and command-line execution. Developed a React + FastAPI GUI for agent interaction with dynamic dropdowns, history, and tool previews. bit.ly/3ZOQip9

Simulations

- **Autonomous QR-Hunter Robot**
Developed a fully autonomous robot in a simulated ROS + Gazebo environment to search and decode QR codes. Designed a modular Python architecture with visual tracking, state transitions, and motion planning to complete map-wide exploration tasks. bit.ly/3GjwYsQ.

Deep Learning and Machine Learning

- **Detection of AI-Generated Text (MLOps Project)**
Built a text classification pipeline using DistilBERT to differentiate between human-written and LLM-generated content. Applied MLOps tools including DVC, MLflow, Docker, and Hugging Face's Trainer API to ensure reproducibility, model versioning, and experiment tracking. bit.ly/3G7CPI9.
- **3D Human Pose Simulation with Gaussian Splatting**
Reconstructed a photorealistic 3D hospital room from real-world footage using COLMAP. Integrated animated characters using Mixamo and trained Gaussian Splatting models for lifelike rendering. Final scenes were deployed in Unity for immersive, real-time simulation. bit.ly/3G2FwV3.