CV

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Professional Website:
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Salesforce:
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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
Robotics & Simulation: ROS, ROS2, Gazebo, AirSim, RViz, Embedded Systems, Arduino
DevOps & Deployment: Docker, Git, DVC

Personal Skills

Proactive
Solution-oriented
Ambitious
Team Player
Independent
Fast Learner

PAVLOS ADAMAKIS

I'm committed to doing my best, constantly eager to learn, and take great pride in contributing to the success of my team.

I'm a dedicated and curious engineer who thrives on solving meaningful problems through a mix of technical insight, teamwork, and continuous learning. I bring a proactive, solution-oriented mindset to every project, whether I'm working independently or collaborating with others.

My approach is grounded in curiosity and driven by impact — I enjoy discovering and applying new technologies while pursuing shared goals. I actively seek feedback, both technical and personal, and view it as a key driver for growth and improvement.

EDUCATION

MSc Eng. Autonomous Systems at Technical University of Denmark, DK
Sep. 2022 – Mar. 2025

- **Selected courses in AI & Machine Learning *(Python, ML, NN, Git)***
  I completed courses providing me with skills within deep learning, machine learning operations, and artificial intelligence. Through these courses I coded and managed extensive projects with the need for version control and control of data pipelines.
- **Selected courses in Autonomous Systems & Robotics *(Control Systems, Path planning, Robotics)***
  I completed courses concerning intelligent systems, unmanned autonomous systems, robotics, and hands-on microcontroller programming, enhancing my skills within various software and hardware.
- **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)***
  I 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)***
  I specialized in robotics through courses in embedded systems, mechatronics, control theory, and system analysis. 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**
  I assisted the head of the mechanical engineering department by working the CAD system and following the process of waste and refuse collection

Team player
Independent
Positive mindset´
Can-do Attitude
Respectful
Fast Learner
Detail-oriented

Software Skills

Machine Learning – Proficient
Python – Proficient
C++ – Intermediate
Embedded Systems – Intermediate
ROS/ROS2 – Intermediate
SQL- Beginner-Intermediate

Languages

English –Native proficiency
Greek– Native proficiency
Danish- Beginner (M1 course)

and sorting, as well as composting, based on actuators and sensors. I worked with basic PLC programming for sensors and actuator integration and collaborated with a team of engineers to develop a pilot project for sustainable waste management in urban areas. This gave me hands/on experience with CAD tools, PLC programming, and sensors and actuator integration in an industrial setting, and taught me how to apply engineering principles to real-world sustainability challenges through teamwork and system design.

Assistant (Internship) at Kostis Hippocrates, GR **Jun. 2019 – Mar. 2020**

- **Independent Civil Engineer**
  I worked with monitoring the development process of the office's projects. I used the software tools ANSYS and SolidWorks for drafting designs and simulations. The purpose of the internship was to gain experience in the organization and monitoring of an office and its projects as well as to understand the limits of the specific service market.

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 is 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

Project Management

- **Project manager**
  For a semester project I held the role of project manager. The project focused on planning the life cycle of an amusement park construction. I created Gantt charts, led daily progress calls, and ensured timely task completion. This role strengthened my leadership skills under pressure, improved my communication skills, and enhanced my ability to manage diverse team dynamics and turn ideas into structured action.

Robotics Design & Simulation

- **Design of a Robotic Arm**
  I designed a fully articulated robotic arm in SOLIDWORKS with real-world constraints and detailed mechanical specs. I applied mechanical engineering principles in kinematics, material selection, and technical drawings with tight tolerances. Through stress testing and DFM practices, I gained a strong understanding of mechanical behavior under load and how to create production-ready designs.
- **Autonomous QR-Hunter Robot**
  I built a fully autonomous robot in a simulated ROS and Gazebo environment to explore and decode five QR codes on a virtual map. Using Python, I developed modular behaviors like state switching, visual tracking, and navigation. Through this project, I deepened my understanding of ROS, Gazebo, and robotic system design, while improving my skills in control flow, motion planning, and debugging in complex simulations. The GitHub code repository can be found here **bit.ly/3GjwYsQ**.

Deep Learning and Machine Learning

- **Detection of AI-Generated Text (MLOps Project)**
  I built a text classification pipeline using DistilBERT to detect whether essays were written by students or generated by LLMs. I cleaned the data, fine-tuned

the model, and tested it for deployment. I used DVC, MLflow, Docker, and Hugging Face's Trainer API to manage training and ensure reproducibility. This project strengthened my skills in transfer learning, NLP, MLOps, and team collaboration, and the GitHub code repository can be found here **bit.ly/3G7CPl9**.

- **3D Human Pose Simulation with Gaussian Splatting**
  I reconstructed a static 3D hospital room from video footage using COLMAP and added dynamic human animations from Mixamo. I trained Gaussian Splatting models to produce photorealistic renders and integrated them into Unity for real-time, lifelike simulation. This project deepened my understanding of computer vision, 3D rendering, and AI-driven animation in immersive environments. The Github code repository can be found here **bit.ly/3G2FwV3**.

Thesis Projects:

- **Master's Thesis** **Sep. 2024 – Mar. 2025**
  For my thesis I worked with deep Reinforcement Learning in UAVs for Wind Turbine Blade Inspection. Together with my partner we designed and implemented an autonomous drone inspection system for internal wind turbine blades using deep reinforcement learning (RL). We used **Unreal Engine** and **Microsoft's AirSim** simulator to create high-fidelity 3D environments replicating the confined, dark interior of turbine blades. We developed RL agents in **Python** using **TensorFlow**, trained with three RL to navigate challenging inspection paths with minimal sensors, before comparing the models based on flight smoothness, path efficiency, and reward optimization. This work aim to reduce human risk and improve the cost-efficiency of turbine maintenance using AI-driven UAV systems and enhanced my technical abilities greatly as well as my project planning skills. The GitHub code repository can be found here **bit.ly/4i7nJt7**.

- **Bachelor's Thesis** **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.