

M. ORHUN KOSE

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Experience

MilSOFT – AI Software Engineer

Nov 2024 – July 2025

Core member of the company's first autonomous vehicle project, developing the 6x6 Bozkurt unmanned vehicle.

- **Contributed to achieving a prototype vehicle capable of fully autonomous 5-minute test runs in obstacle-rich environments within 6 months.**
- Developed the autonomous driving software in **ROS2**, using **Navigation Stack (NAV2)**, transformer-based deep learning models, sensor fusion techniques, and mapping algorithms for perception.
- Implemented **MPPI-based** controller algorithms and integrated them with a custom simulation environment in **NVIDIA Isaac Sim**.
- Set up a Docker-based compilation framework for reliable environment management.

Radius AI – Data Scientist

July 2022 – Nov 2024

- **Spearheaded a human tracker project that replaced the 5-year-old solution resulting in a 40% improvement in accuracy.**
- **Established unsupervised data collection pipelines that create over 40000 annotated data per day.**
- Lead a project to convert human tracker solution to a store heat map product and scale it up to 1500+ stores.
- Built debugging pipelines, reducing data validation from days to hours.
- Automated store area segmentation, saving dozens of hours of manual work.
- Developed model to estimate occluded people's position within 5cm accuracy.

Middle East Technical University – Undergraduate Research Assistant

Nov 2021 - Oct 2022

As a part of the [Cyber-Physical Systems Research Group](#), worked on a TUBITAK project under the guidance of Assoc. Prof. Dr. Ebru Aydin Gol:

- **Processed 1TB+ of Ankara's traffic and vehicle data to improve energy requirement estimates for microgrids.**
- Devised a Probabilistic Hybrid Automata model to predict EV battery usage under varying traffic and road conditions.
- Automated data processing and route correction scripts to streamline analysis.

JotForm – Data Science Intern

Sept 2021 - Oct 2021

Developed a recommendation tool using collaborative and content-based filtering.

Etiya – DevOps Intern

Aug 2021 - Sept 2021

Migrated company's compiling servers to Docker containers.

Education

Albert-Ludwigs-Universität Freiburg – M.Sc. Computer Science, AI Specialization

Oct 2025 - Present

Middle East Technical University – B.Sc. Computer Engineering

Sept 2018 - July 2023

CGPA: 3.36/4 — Student assistant at CENG240 - Programming with Python for Engineers — Member of METU Archery Team (3 yrs)

Technical Skills

Languages/Database/Frameworks: Python, C, C++, ROS2, SQL, Dart, Flutter, Django, OpenCV, PyTorch, TensorFlow, HuggingFace

Software & Tools: Git, Linux, Docker, AWS

Technical: Computer Vision, Deep Learning, Data Structures, Algorithms

Projects

ASTARTE

In the scope of the graduation project, engineered a product which received an award at METU Demo Day, to assist farmers in optimizing irrigation and fertilization, assessing farmland conditions, coordinating employees, and improving overall agricultural efficiency.

- [Project website](#)
- [Github repository](#)
- [Project introduction video](#)

League of Legends Last Hit AI

- AI bot that performs last hits using object detection, transfer learning, and automation. Walk-through video with 40k+ views: [I tried to build a Last Hit AI in LoL using computer vision](#)
- Source code: [Github repository](#)