

Yavuz Murat Yıldırım

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Education

Ondokuz Mayıs University

Bachelor's Degree, Computer Engineering. GPA: 2.82

Samsun, Turkey

2021 - Present

Bafra Fen Lisesi

GPA: 93.3

Samsun, Turkey

2017 - 2021

Experience

AYVOS

Istanbul, Turkey

Computer Vision Intern

August 2025 - September 2025

- Collaborated with senior engineers on integrating AI models into real-world industrial applications.
- Optimized PaddleOCR inference with TensorRT and Triton, reducing latency and resource usage for edge deployment.
- Containerized experiments using Docker, streamlining reproducibility and deployment across environments.
- Worked in a team of interns on weekly computer vision mini-projects covering object detection, segmentation, OCR, and pose estimation.

OMU CEITTS Lab

Samsun, Turkey

Computer Vision Researcher (Student)

October 2024 - July 2025

- Led AI-based smart transportation projects for TEKNOFEST, AUS UAY, UDHAM competitions.
- 2nd place in AUS, Encouragement award in UDHAM.
- Developed ML models for traffic analysis (Python, OpenCV, PyTorch).
- As the leader of **PaveScan** team, engineered road deformations assessment & mapping system for TEKNOFEST Smart Transportation Competition, detected and reported 800+ road surface deformations, leading the team to qualify for the semifinals.
- Contributed to TEKNOFEST UGV Competition with (Team: **Agri-Techny**): developed autonomous driving system, finalist in TEKNOFEST 2025.

Atakum Municipality

Atakum, Samsun

Computer Engineer Intern

August 2024 - January 2025

- Engineered a real-time pothole detection system using YOLOv8, OpenCV, and Flask, achieving 82% accuracy
- Deployed optimized YOLOv8 model on Jetson Nano, delivering edge-based detection at 20+ FPS with sub-150ms latency per frame
- Containerized the application using Docker and Docker Compose for simplified deployment
- Built a Flask & PostgreSQL-based registration system for municipal kindergartens (deployed May 2025), expected to serve 300+ students

Projects & Activities

TÜBİTAK 2209 Research Student – Working on road surface damage and small object detection using computer vision techniques.

Doctor Chat Bot – Fine-tuned LLaMA 2 with LoRA & quantization, deployed via FastAPI with <500ms latency.

Retail Analytics – Built a system for real-time customer tracking and ROI-based density analysis, with insights via a Streamlit dashboard.

Sahalog – Developed a mobile and web application for football field bookings using Flutter, Flask API, Vite, PostgreSQL, and Firebase, integrating backend, dashboard, and real-time reservation management.

Skills

Programming: Python, Java, Flutter (Dart), C, Ruby

AI: PyTorch, TensorFlow, YOLO, OpenCV, Hugging Face

Backend & Web: Flask, Django, Vite, Streamlit, SQLite, PostgreSQL, Firebase

Tools: Git, Docker

Languages: English (YDS: 90 - Professional), Turkish (Native)