ENES DEMİRAĞ

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About Me

I am an MLOps Engineer with a strong background in computer vision, deep learning, LLMs, and real-time AI systems. Over the past several years, I have built and deployed production-grade AI applications at scale, leading teams focused on high-performance solutions. I have hands-on experience with modern AI frameworks and agentic tools. My work bridges machine learning and backend engineering, with a focus on designing scalable, production-ready AI systems.

Education

Istanbul Tecnical University — Istanbul, Turkey
Master's in Computer Science — *Feb. 2021 – 2024*

Istanbul Tecnical University — Istanbul, Turkey
Bachelor's in Electronics and Communication Engineering — *Sep. 2016 – Feb. 2021*

Liverpool John Moores University — Liverpool, UK
Erasmus Student Exchange Program — *Jan. – June 2019*

Full-Time Experience

Chooch — July 2022 – Present
MLOps Team Leader
Chooch is a vision AI company based in Silicon Valley. I developed and led the deployment of real-time inference engine, Generative AI models, LLMs, and backend APIs. Strong in production-grade Python development (testing, packaging, and code reviews) with Git/GitHub workflows (branching, PRs, CI/CD). Experienced in hosting and serving YOLO models, LLMs, and VLMs on the edge, integrating OpenAI and Gemini APIs. Skilled in model optimization using ONNX and TensorRT, and quantization (FP16/INT8). Proficient with NVIDIA Triton Server, Deepstream, Docker, Kafka, Redis, RabbitMQ, MQTT, and MinIO.

Baykar Defence — Aug. 2020 – July 2022
Software Engineer
Baykar Defence is a private Turkish defence company specialising in armed UAVs. I developed augmented reality and real-time video decoding systems, implementing image processing, video enhancement, and filtering techniques using OpenCV and OpenGL. Led over ten vision-based ML projects as a lead engineer, focusing on system reliability and real-time performance. Experienced in production-level C++ and C# development, and API design and implementation for embedded and mission-critical systems.

Skills

- Machine Learning • Deep Learning • Agentic AI • Large Language Models • Vision-Language Models (VLMs)
- LangChain • LangGraph • Google ADK • n8n • OpenAI APIs • Anthropic Claude • Gemini APIs • Ollama
- Python • PyTorch • OpenCV • YOLO • FastAPI • Docker • Linux • Git
- ONNX • TensorRT • Triton Server • Deepstream • Redis • Celery • Kafka • MinIO • MongoDB
- Flutter • Firebase • Google Cloud • REST • gRPC • Protobuf

Project-Based Experience

ShelfScan | *Co-Founder* Jan. 2025 – Present

ShelfScan is a mobile application I co-developed with a friend featuring ingredient scanning and calorie analysis capabilities. Built with Firebase Authentication, Firestore, and Cloud Storage integrations, the app uses the Gemini API.

DermaGlow | *Founder* July 2025 – Present

DermaGlow is a mobile application I developed using Flutter with Firebase tools. The app provides AI-powered skin analysis, personalized skincare routines, and product recommendations.

Hudux AI | *Founder* Jan. – July. 2025

Hudux AI is an AI-powered visual monitoring platform (discontinued) that connects to camera networks and interprets video streams via natural language commands. I founded and led development of the core system, integrating vision-language models (VLMs), real-time scene understanding, and command parsing.

ITU AUV Team | *Software Team Member* Sept. 2018 – Apr. 2020

ITU AUV Team is an underwater robotics team, that came together to prepare a fully autonomous underwater vehicle. I prepared custom dataset for our needs, applied data augmentation, applied training and fine-tuning and deployed on a Nvidia Jetson computer. We won multiple international competitions.

Ravinspect Tech. | *Software Team Member* July – Sep. 2018

This start-up company is developing drones for visual inspection. I developed a ROS package for point cloud filtering and real-time mapping , worked on stereo vision and visual odometry using ROS environment.

ITU ROV Team | *Software Team Leader* Oct. 2016 – Sept. 2018

This is another underwater robotics project which we founded with my friends to develop and spread underwater robots in Turkey. We build a Remotely Operated Underwater Vehicle. I managed the software development process as a team leader and worked on computer vision tasks. We won multiple regional and international competitions.

ITU Racing Team | *Research Assistant* Sept. 2017 – Aug. 2018

At Advanced Vehicle Technologies, Autonomous and Power Systems Laboratory of my faculty, I worked as a research assistant working on autonomous driving technologies. Worked with LiDAR systems, SLAM and point cloud processing on a self driving car.

ITU Department of Information Technology | *Research Assistant* Apr. – July 2017

ITU BIDB develops all IT needs of university as hardware, software, data communication systems and technical services in our university. I was working there as a part-time student.

Languages

Turkish : Native
English : Advanced