

Computer Engineer - Mustafa BİÇER

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Portfolio: www.pogob.site | LinkedIn: [Mustafa BİÇER](#) | GitHub: [pogob](#)

Innovative Computer Engineer with a strong passion for AI and innovation. I achieved 10th place in Turkey in the Artificial Intelligence in Transportation Competition and led my Teknofest team to 1st place in Sakarya in the Digital Technologies in Industry category, serving as team leader for 1 year. I have worked extensively with YOLO and similar models, utilizing computer vision techniques to solve complex problems. Additionally, I have developed my own agentic AI using open-source language models. I specialize in multi-platform application development with Flutter, creating products that prioritize user needs while ensuring efficiency and scalability.

Experience

FEBRUARY 2025 – JUNE 2025

AI R&D Intern | Venhancer | Serdivan, Sakarya

- Contributed to Venhancer's R&D team, focusing on AI-driven mobile and backend development, leveraging Large Language Models (LLMs) and Retrieval-Augmented Generation (RAG) to solve real-world business challenges.
- Developed AI solutions for insurance company data analysis, optimizing performance and scalability using Python, TensorFlow/PyTorch, and NLP techniques, improving data processing efficiency.
- Designed and deployed production-ready AI systems to enhance client data insights, supporting tailored solutions that boost satisfaction and retention.
- Led machine learning optimizations that drive sustainable business growth, ensuring AI-driven strategies align with industry needs for long-term impact.

JUNE 2024 – SEPTEMBER 2024

Computer Vision Intern | YEDITEK | Nilüfer, Bursa

- I collaborated on various AI-driven industrial automation projects, gaining hands-on experience with the Basler camera SDK, OpenCV, and Python, increasing defect detection accuracy by 7%.
- I optimized image acquisition using dome lights, coaxial lights, and backlighting techniques for high-precision inspection, reducing inspection time by 40%.
- As my capstone project, I developed an industrial-standard, deep learning-based quality control software for Babe Metal, increasing product defect classification accuracy to 92%.
- The software utilizes edge detection, defect classification, and real-time object detection (YOLO/CNN) to identify part features, flag anomalies, and trigger automated alerts, reducing false positives by 12% and improving production efficiency.

Skills

Artificial Intelligence • Communication • Team player • Management Skills • Data analytics • English (C1)

C • C++ • Kafka • Java • Python • Redis • Flutter • MongoDB • PostgreSQL • PyTorch • Tensorflow • Docker • Git

Education

MAY 2025

Bachelor of Computer Engineering | Sakarya University

Sakarya, TR 2.8 GPA

Developed an AI-powered medical image analysis system with YOLO-based detection, a Python processing service, and a MongoDB database. Built a Flutter mobile app for image uploads, instant results, and scan history, ensuring secure and efficient data management.

JUNE 2020

Emir Sultan High School | Yildirim Bursa

Bursa, TR 87/100 GPA

Projects

Agentic AI | General purpose multi model LLM

This Flask-based multi-model platform combines LLMs (Ollama), image classification (MobileNetV2), and regression models with a RAG system (FAISS/LangChain) and simulated IoT controls. It serves as an AI orchestration solution where users can extract automatic context from PDFs, featuring real-time streaming support and REST API integration.

Technologies

Flask • Python • Ollama API (Mistral/Llama) • MobileNetV2 • FAISS • HuggingFace Embeddings • LangChain • pdfplumber • REST API • JavaScript • CORS

Thesis ECG Vision | AI-Powered ECG Analysis System

This cross-platform healthcare solution analyzes ECG images using optimized YOLOv9 deep learning models, delivering AI-assisted anomaly detection for medical professionals. Features a Flutter frontend with Dart microservices backend, offering secure patient management and real-time analysis visualization through a Flask-based AI API. Reduced ECG interpretation time by 85% in clinical tests while maintaining 90% detection accuracy.

Technologies

Flutter • Dart • YOLOv9 • PyTorch • REST API • MongoDB • Flask • JWT • CI/CD • Material Design

Certificates

- Teknofest Digital Technologies in Industry Participation Certificate.
- Teknofest Artificial Intelligence in Transportation Participation.
- Mobile Application Course Participation Certificate with Google Flutter.

References

Yeditek - Co-Founder and CEO of Yeditek

- **Aziz KARABURUN** +90 545 694 85 86