Mert Cihan Bayir

Software Engineer — Artificial Intelligence — Machine Learning — Mobile AI

mertcihanbayir@gmail.com | LinkedIn | GitHub

Summary

Software Engineer specialized in Artificial Intelligence, Machine Learning, Computer Vision, and Kotlin-based mobile applications. Experienced in end-to-end AI pipelines including LIDAR data annotation, feature engineering, model training, mobile deployment (TFLite), workflow automation, and containerized systems.

Education

Sakarya University – Software Engineering 2021 – 2025

- Bachelor's Degree in Software Engineering.

Experience

Ford Otosan – Data Annotator 2023 – 2025

- Annotated large-scale LIDAR point cloud datasets for autonomous driving perception systems.
- Labeled 3D objects such as vehicles, pedestrians, and road elements to support detection and tracking models.
- Performed annotation validation and quality control to ensure dataset consistency and accuracy.

Internships

Ford Otosan – Artificial Intelligence Intern 2024

- Developed a deep learning-based assistant model to accelerate data annotation workflows.
- Improved labeling efficiency by reducing manual annotation time.

MKU Technology – Artificial Intelligence Intern 2024

- Worked in the AI team of an early-stage gender detection project.
- Contributed to data preprocessing, feature extraction, and model evaluation pipelines.

Programs

Google Artificial Intelligence and Technology Academy 2025

- Completed Google-certified Artificial Intelligence and Machine Learning courses.
- Developed AI-driven projects during hackathon and bootcamp programs.
- Built a React-based platform generating fully AI-driven personalized daily learning plans.
- Designed an educational AI system that guides users to discover answers instead of providing direct responses.
- Completed entrepreneurship and innovation-focused training.

Projects

Turkish Coffee Fortune Telling AI Application Graduation Project

- Created and manually annotated a custom dataset of 8,049 images.
- Trained a YOLOv11n classification model achieving 99.5% accuracy.
- Converted the model to TFLite and integrated it into a Kotlin-based Android application.
- Generated personalized fortune interpretations based on detected cup type.

Early Gender Detection Machine Learning

- Converted raw audio data into structured datasets using feature extraction and normalization techniques.
- Developed a Random Forest model achieving 96.4% accuracy.

EEG-Based Yes / No Detection Machine Learning

- Collected EEG data using a 14-channel Emotiv EEG device.
- Extracted signal-based features and trained a Random Forest model achieving approximately 90% accuracy.
- Successfully detected real-time cognitive yes/no responses.

Skills

Programming: Python, Java, Kotlin

Mobile Development: Android, Kotlin, TFLite Integration

Machine Learning: Random Forest, SVM, Feature Engineering, Signal Processing

Deep Learning: YOLO, CNNs

Automation: n8n, Workflow Automation

DevOps: Docker, Kubernetes, Git, GitHub

Data: LiDAR Annotation, Data Collection, Dataset Balancing