

Tuğba Çağla EREN

COMPUTER ENGINEER

Phone: +90 534 055 35 50

E-mail: tugbacaglaeren@gmail.com

Linkedin: [linkedin.com/in/cagla-eren](https://www.linkedin.com/in/cagla-eren)

Github: <https://github.com/caglaeren>

Kaggle: <https://www.kaggle.com/caglaeren>

Summary

Computer Engineering graduate with a strong background in Data Science and AI. Experienced in bridging the gap between complex technical systems and business requirements through end-to-end project lifecycle management. Skilled in data-driven decision-making, process documentation, and prototyping.

Work Experience

Atosis Araç Takip ve İletişim Sistemleri / Ankara

Intern | July 2020 - August 2020

- Developed a .NET-based data integration system to migrate vehicle listings from external web platforms to a centralized backend database.

Başarsoft / Ankara

Intern | July 2022 - September 2022

- Built a geospatial data management system using .NET Web API and PostgreSQL, integrating OpenLayers and JavaScript for real-time location mapping and database synchronization.

Education

Kırıkkale University September 2018 – February 2024

Computer Engineering

Projects

Genomic-RAG for RARS1 Gene Analysis

Python, LangChain, ChromaDB, Ollama

- Managed the complete SDLC of a specialized AI tool, from identifying user needs to deploying a local LLM solution.
- Authored detailed technical documentation and implemented a 'Strict Citation' protocol to ensure data integrity and user trust.

AI Fraud Detection System

Python, TensorFlow, Scikit-learn, Pandas, FastAPI, Redis, Streamlit, WebSockets

- Scalable Real-Time Architecture:** Developed a high-performance backend using FastAPI and WebSockets, integrating Redis for efficient data caching and rapid message brokering to support real-time fraud monitoring.
- Latency Optimization:** Leveraged Redis to minimize system response times, ensuring seamless live data updates on the Streamlit dashboard for immediate risk assessment.
- Threshold Optimization:** Refined decision-making logic to align with business risk tolerance, achieving a 0.95 ROC-AUC on highly imbalanced financial datasets.

Technical Skills

- Programming:** Python, SQL, C#, JavaScript
- Libraries & Tools:** Pandas, NumPy, Scikit-learn, TensorFlow, PyTorch, Redis
- Machine Learning:** Regression, Classification, EDA, Feature Engineering
- Deep Learning & AI:** ANN, CNN, RNN, Transformers, RAG, LLMs, Vector Databases (ChromaDB), FastAPI
- Methodologies & Analysis:** SDLC, Agile/Scrum, User Stories, Technical Documentation, Prototyping (Streamlit/Gradio), Data Visualization

Certificates

- Google Cloud: Introduction to AI & ML Boostcamp (2025)
- Data Science & Machine Learning: 100-Day Intensive Camp (2025)
- Veri Bilimi için Python ve Tensorflow (2026)