Ümit SARIÖZ

Data Scientist | Machine Learning Engineer

- | umitsariozz@gmail.com | linkedin.com/in/umitsarioz | github.com/umitsarioz | personal blog

SKILLS

- Python, Bash, SQL
- PySpark, Pandas, NumPy, Networkx, BeautifulSoup — **Data Manipulation**
- PyTorch, Scikit-Learn, Langchain, NLTK, VLLM — **Machine Learning**
- Matplotlib, Seaborn, Plotly — **Visualization**
- PostgreSQL, Mongo, Cassandra, Redis, Milvus, HDFS, Kafka, Sqoop — **Data Storage / Database**
- Git, Linux, Docker, Jupyter Notebook, Fast API, Gradio , Streamlit, Grafana, JIRA — **Developer/Admin Tools**
- English (Professional Working Proficiency), Turkish (Native) — **Languages**
- Machine Learning, NLP, LLMs, Forecasting, Clustering, Anomaly Detection, Graph — **Expertise**

PROFESSIONAL EXPERIENCE

Data Scientist at Innova via Codecrafters   Dec 2022 - Jan 2025

- Chatbot with Local LLMs and RAG was developed to improve efficiency for over 2,000 personnel, streamlining workflows and response times.
- Clustering for Network Topology Optimization was implemented using graph neural network embeddings, optimizing resource allocation for over 12,000 devices and benefiting 50 million customers. High performance was achieved supporting more strategic investment decisions. (Silhouette:0.72; F1: 0.87; Accuracy: 0.92)
- Forecasting model for traffic saturation was built using deep learning, achieving 0.84 accuracy and enabling proactive network management to prevent overloads and enhance customer experience.
- Predictive system for mobile cell tower battery life was developed, achieving 0.89 accuracy and saving €2 million annually, benefiting 50 million customers by enabling timely maintenance and extending equipment lifespan.
- Code reviews were conducted as a member of the Türk Telekom AI team's Code Review Committee, reducing bugs by 80% and improving resolution times by 90%, enhancing system reliability and customer satisfaction.

Software Engineer at KAVAK.com   Nov 2021 - Nov 2022

- Recommendation System for Carvak.com was developed to deliver personalized vehicle listings, improving user engagement by 20% and reducing request times from over one second to milliseconds through query caching.
- Crawler was developed to automate data scraping and storage for vehicle offers, integrating results into Google Sheets to provide actionable insights into market pricing trends for pricing and planning teams.
- RESTful API was created for vehicle data retrieval via chassis numbers, enabling quick access and improving operational efficiency and customer satisfaction.

Artificial Intelligence Engineer, Freelancer   Jan 2021 - Aug 2021

- Developed Machine Learning solutions and created ETL pipelines and Visualizations

EDUCATION

BSc, Faculty of Computer Engineering at Gazi University   2021 Graduate

CERTIFICATES

Natural Language Processing Specialization by DeepLearning.AI   Jul 2024
Deep Learning Specialization by DeepLearning.AI   Oct 2020