

Experience

Appsilon

Remote

Business Intelligence Developer (R/Shiny)

March 2023 – Present

- Developed Retrieval-Augmented Generation (**RAG**) tools for natural language interaction with documents via **LLMs** on **AWS Bedrock**, integrating **Pinecone**, **FastAPI**, and **R/Shiny** to access internal knowledge and technical documentation.
- Built a full-stack web application for Boston Medical Center to explore and share health equity data across common data models; featured in *Journal of Clinical and Translational Science* ([Adams et al., 2024](#)) and presented at [Shinyconf2024](#).
- Designed a reusable Shiny app template for a global pharmaceutical client that generates Tables, Listings, and Figures directly from **CDISC ADaM** datasets, cutting development time from several months to a few weeks. Introduced **CI/CD** with **GitHub Actions** and increased **test coverage** from 0% to 90%.
- Authored a widely-read [Shiny security guide](#), covering authentication, authorization, input sanitization, and deployment best practices. The post has become a reference for the R community and appears at the top of Google search results for “Shiny security.”

24saatteis

Istanbul, Türkiye (Hybrid)

Data Scientist

Jan 2019 – Feb 2023

- Developed a **Bimodal Neural Network** using **Tensorflow** and **OpenCV** that predicts OCEAN personality scores from video interviews with 90% accuracy.
- Built and deployed multiple predictive models to **AWS Lambda** with **SQL**, **Python** & **R**:
 - Ranking algorithm for **Elasticsearch** that boosted customer retention 30% by predicting the likelihood of a candidate applying to a given job listing using **logistic regression**
 - **TF-IDF cosine similarity matrix** that computes similarity between ISCO job classifications
 - **NLP** model that detects malicious content with 95% accuracy.
 - **Marketing Mix Models** to uncover relationships and forecast trends between marketing activities and business KPIs, using data extracted via **Google BigQuery**, **Google Ads API**, and **Meta Marketing API**.
- Built a Shiny-based internal notification tool integrated with **OneSignal**, allowing dynamic, rule-based targeting of users based on candidate-job fit scores and deployed to **AWS EC2**. Enabling marketing and operations teams to run campaigns without dev support.
- Integrated and designed **Salesforce** for the organization, build **ETL** model for feeding data from **MySQL** database to Salesforce

Side Projects

[gait](#) - CLI tool for reviewing code changes using **LLMs**. Built with **Python's Typer** library and **OpenAI API**.

[tefasr](#) - R package for getting historical data of public investment funds in Turkey.

Education

Ozyegin University

Istanbul. Türkiye

Economics

2019