Farid Karimli

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SKILLS

Python, JavaScript, Java, C++, Cloud Services (GCP), SQL, Docker
Knowledge: Data Analysis, Statistics, Machine/Deep Learning, Computer Vision, Web Development, GUIs, Data Systems

WORK EXPERIENCE

MS Researcher, *Image and Video Research Group @ BU CS*, Boston, MA   June 2023 – present
- Drove the redesign of CameraMouse, incorporating advanced face-tracking capabilities to improve user interaction in a novel architecture focused on modularity and open source.
- Implemented facial gestures to allow for clicking, reduced faulty re-initialization, increased tracking accuracy by 40%.
- Resolved memory leaks, frame drops and dependency issues, reducing boot time by over 5 seconds.
- Created an interface for analyzing mouse movement efficiency via Fit's Law, used for quality assurance, and assessing ease of use. Developed the general testing routine and recruited student testers.

Engineering Intern, *Software Application and Innovation Lab,* Boston, MA   Summer 2022 & 2023
- Engineered a graph visualization of the ASL lexicon using Python and D3.js, facilitating linguistics research.
- Troubleshoot OS and API functionality issues on mobile and desktop applications. Addressed dependency issues in C++ applications and reduced codebase size by 30%.
- To market impact and advertise domain expertise, deployed a data pipeline for a SAIL data dashboard for analyzing operations, hiring, and engineering, using the Click Up API and D3.

Data Analyst, *BU Sargent College of Health*, Boston, MA   Sept. 2023 – Dec. 2023
- Investigated the physical and cognitive effects of remote work on study participants.
- Developed methods for analyzing attrition and the framework for data cleaning and inspection.
- Conducted predictive and causal analysis on workers' mental health scores, physical activity, and productivity.

Team Lead, *BU Spark!*, Boston, MA   Sept. 2022 – Dec. 2
- Analyzed police (FIO) data to uncover demographic bias and patterns – to drive public policy and activism.
- Designed interactive visualizations, including plots, graphs, and geographic maps to depict complex data trends.
- Guaranteed timely deliverables and maintained regular communication with the client.
- Managed the complete data analysis lifecycle, from data collection to interpretation.

Data Engineer, *Smart Solutions*, Baku, Azerbaijan   June 2021 – August 2021
- Engineered Python scripts to automate the collection of e-tender data from Azerbaijani corporations.
- To support market analysis, collected and analyzed social media posts from banks for sentiment and keywords.
- Standardized SQL scripts to fetch data relevant to the analysis and visualization of trends and fraud in e-tender marketplace system.

EDUCATION

Boston University, Faculty of Computing and Data Sciences   Boston, MA
Data Science M.S.   exp. May 2024

Boston University, College of Arts and Sciences   Boston, MA
Computer Science B.A., Economics Minor. GPA 3.7   May 2023

PROJECTS

ASL to Text – transcribing (limited) ASL to text from a live feed using a model built upon ResNet50.
FGK AI – chatbot that mimics my style of texting and writing – uses RAG and trained on personal chat data.
MathLLM – fine-tuning GPT-3.5 to act as a context helper for GPT4 to solve Math PhD problems.
FinModel – LSTM-based financial model to predict the closing price of the NASDAQ-100 (MSE < 100). Personally, collected the dataset.