Mo Aljuboori

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Education

University of California Berkeley Berkeley, CA

Bachelor of Arts in Computer Science & Minor in Data Science *Aug. 2022 – June 2024*

Coursework (3.9 GPA) *Data Structures and Algorithms, Computer Architecture/Assembly, Database Systems Object Oriented Programming, Computer Security, Web Design, Computer Networking Principles and Techniques of Data Science.*

Teaching Experience *Data 8 Academic Intern, Calculus I Head TA*

Technical Skills

Languages: Java, Python, C/C++, Swift, Go, SQL (Postgres), JavaScript, HTML/CSS, R
Frameworks: React, Node.js, Flask, JUnit, WordPress, Material-UI, FastAPI

Experience

Undergraduate Research Assistant Mar 2023 – Aug 2023

Berkeley Nano Technology Lab *Berkeley, CA*

- Worked on the software team in a URAP, led by Dr. Khalid. I performed data collection and manipulation on the website used to visualize experiments ran on boards.
- Created a molecule database for the team that contains features of molecules like DNA Length.

Software Engineer Intern Mar 2023 – Aug 2023

Ai.vocate *Berkeley, CA*

- Collaborated closley with a team of engineers to design and build the entire iOS mobile application from scratch, ensuring a seamless and intuitive user experience.
- Utilized Swift programming language and iOS development frameworks to create robust and scalable features for the app. Integrated AI algorithms and natural language processing techniques to deliver accurate and reliable legal advice to users.

Software Engineer Intern Jun 2021 – Aug 2021

Birdeye Inc. *Palo Alto, CA*

- Recreated and improved the company website using HTML, CSS, JavaScript, and strapi.io resulting in a 50% decrease in page loading time and a 20
- Promoted to team leader by supervisor, and delegated positions by assessing the strengths of each member and supported them in their roles by helping in resolving any coding issues that we encountered.

Projects

Spam Email Detection Repo

- Developed an Email Spam Classifier using a real-world dataset of 8,348 emails, achieving over 96% accuracy on both training and test sets using logistic regression.
- Implemented rigorous Feature Engineering, which included analyzing high-frequency words, leveraging chi-squared scores for word significance, and detecting email reply patterns to optimize model performance.
- Utilized advanced Data Analysis techniques, like heatmaps for feature correlation and ROC curves for threshold optimization, to ensure model robustness against false positives.

dotPrompt Repo

- Created a templating engine in Python that is suited specifically for Generative AI prompts to allow prompt re-use and sharing.
- Built a preprocessor using regexes and Python module Re to scan template text to understand the difference between static text and dynamic parameters.
- Implemented a front-end template editor in Flask, HTML, and CSS to encourage users to engage with the template engine and easily create their own templates.

Scheme Interpreter Repo

- Developed a Scheme interpreter in Python to execute Scheme programs.
- Implemented lexical scoping, first-class functions, a macro system, and error handling.
- Optimized the interpreter by implementing various optimizations such as tail recursion.

K-NN Movie Classifier Repo

- Developed a K-Nearest Neighbor (KNN) movie classifier model to accurately classify movies based on their genres.
- Utilized Python to process, clean, and apply feature engineering to a movie dataset.