

Education

University of California, Berkeley — Master of Information and Data Science May 2024 (expected)

Relevant Coursework: Statistics, Data Visualization, Data Engineering, Data Programming, Research Design and Application, Applied Machine Learning, Natural Language Processing, Ethics

University of California, Irvine — BA in Quantitative Economics, Minor in Mathematics Jun 2020

Relevant Coursework: Machine Learning for Economists, Mathematical Analysis, Probability and Statistics, Data Analysis

Skills and Tools

- *Skills:* Statistical Analysis, Probability, Linear Regression, Panel Data Regression, Time-Series Data Analysis
- *Machine Learning:* CNN, RNN, Natural Language Processing
- *Data Visualization:* D3.js, Tableau, Altair
- *Data Analytic Tools:* Python (Tensorflow, Pandas, Matplotlib, Seaborn), Stata, R, Matlab
- *Web Design languages:* HTML, CSS3, Javascript, SCSS, Typescript, Angular, PHP, React
- *Developer Tools:* Git, SQL, GraphQL, Bash, Docker, DevOps, Jenkins, AWS
- *Certifications:* Java SE 8 Oracle Certified Associate

Projects

Ongoing Capstone: Multi-modal Radiology Triageing — Technical Researcher, University of California, Berkeley Ongoing

- Ongoing capstone project (completion in May 2024) with the purpose of creating a multi-modal model designed to provide suggestions for different types of imaging services to a clinician based on patient/case data and history.
- Using the MIMIC-IV dataset, intakes tabular data, clinician free-text notes, and previous images (if available) in an attempt to generate a prediction on if further imaging is required.
- Researching existing multi-modal models and methodology as well as previous studies in healthcare-AI integration.

Evaluating the Efficacy of Pre-Trained Models and LSTMs in Abstractive Summarization of Reddit Posts — Coauthor, University of California, Berkeley Dec 2023

- Natural language processing project and paper focused on creating abstractive summarizations of informal text, with the primary focus on replicating the vocabulary and tone of the medium, in this case Reddit. Multiple models created, tested, and finetuned using both pre trained and completely customized models with pytorch.
- Utilized the TLDR-17 dataset to train models, with evaluation performed in both ROUGE and BERTScores, bringing in a focus on utilizing trained embeddings for tonal evaluation against the original text.

FitBitters — Data Visual Dev, University of California, Berkeley Aug 2023

- Data visualization project of openly available FitBit tracker data, creating a visual and interactive dashboard to explore the various relationships between certain variables. Created with D3.js, Altair, and Tableau, and all displayed on a simple webpage hosted on a UC Berkeley web server.
- Contains 5 different interactive data visualizations: a breakdown of exercise intensity throughout a given time period, the average exercise trends of the population, the distribution of heart rate throughout different exercise intensities, the amount and quality of sleep throughout a given time period, and the correlation between a variety of variables.

Twitter Sentiment Analysis — Finetuning Dev, University of California, Berkeley Apr 2023

- A neural network ML model project to determine the sentiment value of a tweet, and to test the generalizability of such a model beyond the data it was trained on.
- Created and finetuned multiple variations of a neural network model using Google Collab, Tensorflow, Github, and Bash.

Work Experience

Infosys

Remote

Technology Analyst

Oct. 2023 - Present

- Identified and researched new technologies and business partner's technologies to integrate into the application with minimal disruption.
- Analyzed business requirements and developed technical solutions for integrating data collection tools into the client's website, improving data gathering rates by 20%, resulting in a clearer picture of client's application usage.
- Collaborated with multiple teams and partners to design an optimal architecture while providing guidance to junior team members on web projects.

Senior Associate Developer

Jan. 2022 - Oct. 2023

- Acted as goto developer and consultant for client's Product Managers concerning the client's application.
- Advised client in development and design of multiple new functionality and integration, improving user interaction by 15% and increasing user satisfaction by 5%.
- Debugged crucial systems to address live production performance issues and improving performance by ~20%.
- Reviewed code for various teams and developers, advising and offering alternative solutions to avoid possible performance bottlenecks.
- Managed teams of 3-5 developers in frontend development in multiple concurrent projects.
- Introduced GraphQL and integrated multiple third party software into application.

Associate Developer

Jan 2021 — Dec 2021

- Recreated client's customer facing website in Angular 11, improving client server performance load, enabling more interactive web design, and decreasing code maintenance load.
- Parsed and interpreted client's Java code for migration to Angular and for documentation.
- Addressed and informed clients of bug fixes and changes due to language differences.
- Recreated critical parts of the website within a tight time-frame using Agile methodology.
- Led and guided a small team on how to create automated test cases.
- Advised client's in-house developers on how to best use new components and resources.

Revature

Remote

Associate

Dec 2020 — Jan 2021

- Trained for Java SE 8 (OCA Certification), Angular, React, PostgreSQL, HTML, JS, CSS, SCSS.
- Utilized AWS S3, EC2, and Jenkins, as well as GitHub workflows to build DevOps.
- Utilized frontend and backend technologies to build full stack applications.