Bret Rosen | Software Engineer

Minneapolis, MN | bretrosen@gmail.com | GitHub | LinkedIn | Portfolio

SKILLS

Python, SQL, JavaScript, React.js, Redux, Node.js, AWS, Git, HTML, CSS, RESTful APIs, Agile Methodology

PROJECTS

Debate My Professors, *Full Stack Project* - React | Flask | Agile   Live Link | GitHub Repo
A clone of the website Rate My Professors populated by historical academics.
- Designed a PostgreSQL database in production utilizing SQLAlchemy in development and leveraging the random module in Python to generate thousands of professors/courses and reviews.
- Used RESTful API conventions with Flask on the backend and React on the frontend to create efficient and standardized routes, ensuring seamless data flow through the application.
- Added a debate feature using aggregate review data, allowing users to simulate a DnD style debate.
- Created a search function accessing the Redux state to return results based on dynamic user input.

Foxtrot, *Full Stack Project* - React | Flask | Agile   Live Link | GitHub Repo
A clone of the website Robinhood.
- Employed version control via GitHub to collaborate with two other team members, using a modular approach to separate project features while maintaining best practices for Agile workflow.
- Implemented price charts with the Chart.js package to render dynamic graphs of stock prices.
- Incorporated the Finnhub API to display updated information about financial assets.

NYC Yellow Taxi Analysis, DuckDB | Pandas | PowerBI
Exploration and analysis of the profitability of taxi operation in NYC.
- Extracted data for 38 million taxi rides from 2023 to a Parquet file using DuckDB.
- Transformed data through exploratory data analysis, cleaning, and imputation with Pandas.
- Loaded dataset into a PowerBI dashboard to provide insights into taxi analytics.
- Created a report detailing recommendations for using KPIs to increase profitability of taxi operation.

EXPERIENCE

Software Developer – AI Trainer, *DataAnnotation*   2023 - Present
- Train large language models (LLMs) in languages including Python, JavaScript, HTML, and SQL.
- Evaluate LLMs for performance, significantly improving response correctness.
- Advance LLM optimization through prompt engineering, documenting key model differences.

STEM Tutor, *Numerade*   2020 - 2022
- Conducted virtual tutoring sessions in Python, calculus, and mechanics, boosting student comprehension and performance.
- Tailored teaching methods to individual learning styles, markedly improving academic outcomes.
- Leveraged video conferencing and interactive tools to enhance virtual learning experiences.

High School Teacher, *Zibo Experimental High School, Zibo, China*   2011 - 2017
- Taught computing, math, and science, significantly raising students' academic and language skills.
- Created and implemented a cloud-based grading system, increasing parent engagement and streamlining records.

EDUCATION

Certificate in Full Stack Development, App Academy
Bachelor of Science in Engineering, Harvey Mudd College