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 from the database which allows users to simulate a DnD style debate/combat.
- 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.

EXPERIENCE

Software Developer – AI Trainer, *DataAnnotation.tech* 2023 - Present

- Train AI in languages including Python, JavaScript, HTML, and SQL.
- Test experimental large language models by generating prompts for code generation and analyzing previously generated prompts, evaluating code quality for correctness and performance.
- Optimize performance of models by correcting mistakes in code and documenting comparisons between different models.

Online STEM Tutor, *Numerade* 2020 - 2022

- Conducted virtual tutoring sessions for undergraduate STEM courses by explaining problem-solving strategies and reviewing core concepts in subjects including Python, calculus, and mechanics.
- Demonstrated proficiency in adapting teaching methods to suit individual learning styles, resulting in improved comprehension and academic performance by students.
- Utilized various online platforms and tools to facilitate virtual learning, including video conferencing, interactive whiteboards, and collaborative document sharing.

High School Teacher, *Zibo Experimental High School, Zibo, China* 2011 - 2017

- Effectively taught courses in math, science, computing, and English, catering to varying levels of English proficiency, resulting in improved academic performance and language skills.
- Developed a cloud-based grading system and trained staff in its use as student registrar, increasing parent engagement and improving school record-keeping.

EDUCATION

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