

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

STEM Educator, 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.

Systems Engineer, FAA, Oklahoma City

2003 - 2005

- Successfully oversaw the procurement and installation of ILS systems across 10 airports.
- Developed a streamlined documentation system, reducing report generation time by 30%.

EDUCATION

Certificate in Full Stack Development, App Academy

Bachelor of Science in Engineering, Harvey Mudd College