# Bret Rosen

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## SKILLS

Python (Pandas, NumPy), JavaScript, SQL, React.js, Redux, Git, AWS (S3, EC2), RESTful APIs, Agile Methodology

## **EXPERIENCE**

Webmaster, South Dakota Music Teachers Association

- July 2024 Present Modernize website by adding SSL certificate and mobile optimization using Bootstrap, CSS, and JavaScript. •
- Monitor website traffic with Google Analytics and Search Console to optimize SEO and user engagement. •
- Troubleshoot and resolve technical issues related to website functionality and hosting. •

## AI Trainer, DataAnnotation

- Train large language models (LLMs) in languages including Python, JavaScript, and SQL.
- Evaluate LLMs for performance, significantly improving response correctness. •
- Advance LLM optimization through prompt engineering, documenting key model differences.

## **STEM Tutor**, Numerade

- Tutored 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

- Taught computing, math, and science courses to ESL students, preparing them to study abroad.
- Utilized a computer lab to conduct classes of 15 to 25 students, focusing on digital literacy skills including Word/PowerPoint, Excel/Access, and graphic/web design.
- Implemented a cloud-based grading system, increasing parent engagement and streamlining student record management.

# PROJECTS

Debate My Professors, Full Stack Project - React | Flask | Agile

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. ٠
- Created a search function accessing the Redux state to return results based on dynamic user input.
- Utilized AWS S3 Buckets to host and maintain images, ensuring high availability and scalability. •

## Foxtrot, Full Stack Project - React | Flask | Agile

A clone of the website Robinhood.

- Organized and led sprint planning, facilitating Agile workflow and ensuring project MVP was delivered within the required two-week timeframe.
- Employed version control via GitHub to collaborate with team members, using a modular approach to separate project features.
- Implemented price charts with the Chart. is package to render dynamic graphs of stock prices.
- Incorporated the Finnhub API to display updated information about financial assets. •

# **EDUCATION**

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

September 2020 – December 2022

September 2011 – June 2017

Live Link GitHub Repo

Live Link GitHub Repo

December 2023 - Present