# **Bret Rosen**

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### **SKILLS**

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

### **EXPERIENCE**

## **Software Developer - Al Trainer**, *DataAnnotation*

December 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

September 2020 - December 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

September 2011 - June 2017

- Taught computing, math, and science courses to ESL students, preparing them to successfully study abroad in a Western academic environment.
- 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

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.
- Utilized AWS S3 Buckets to host and maintain images, ensuring high availability and scalability.

NYC Yellow Taxi Analysis, Data Analysis Project - DuckDB | Pandas | Power BI Exploration and analysis of the profitability of taxi operation in NYC.

Report | GitHub Repo

- 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 Power BI dashboard to provide insights into taxi analytics.
- Created a report detailing recommendations for most profitable pickup neighborhoods and times using a KPI based on fare and trip duration.

### **EDUCATION**

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