Marie Goetzke

Software Engineer
New York, NY

Portfolio | Github | LinkedIn
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TECHNICAL SKILLS

React, Redux, Ruby, Rails, JavaScript, jQuery, HTML, CSS, SQL, PostgreSQL, SQLite3, R, Python, Git, Webpack

PROJECTS

Flack   (Ruby on Rails, React, JavaScript)   live | github
Flack is a web-based instant-messaging application inspired by Slack.

- Incorporated Ruby on Rails' Action Cable to manage websocket connections for database persistence and live broadcasting of messages to the channel in view
- Configured PostgreSQL database and Rails models to utilize polymorphic associations reducing the total number of necessary database tables by 40%, heavily DRYing up backend code, and ensuring scalability
- Followed React / Redux best practices of unidirectional data flow to ensure DOM manipulation reflects real-time updates to messaging components housed within the frontend state
- Leveraged custom SQL queries taking advantage of Active Record associations to extract data from multiple tables in a single query reducing server load

Mapping The Met   (JavaScript)   live | github
Mapping the Met provides a visualization of the Metropolitan Museum of Art's collection.

- Integrated Metropolitan Museum of Art's API and JavaScript asynchronous functionality to fetch collection information for all countries before displaying data to give user a seamless, uninterrupted experience
- Utilized JavaScript D3.js library to create interactive visualization of museum's collection allowing user to interpret data with geographic context
- Implemented DOM event listeners to perform additional API calls and load country-specific information based on user interaction, improving user experience by limiting unnecessary and time-costly data loads

EXPERIENCE

Data Analytics and Business Consultant

IBM   Aug 2017 - Aug 2019

- Supported the development and delivery of custom applications by collaborating across internal and client teams to solicit requirements, establish consensus, track progress, and manage documentation for the software development life cycle
- Created custom staffing models for client using historical analysis and time series forecasting in R, reducing manual calculation time by 75%
- Built Python program to synthesize input datasets for scheduling optimization software, allowing for significant reduction of calculation runtime and a more performant product
- Managed activities surrounding proposals and bids for major upcoming mergers to include defining and analyzing market KPIs, identifying IBM's competitive position, establishing team consensus, and developing client-facing proposal
- Developed client and industry perspectives for executives by integrating academic studies and market research on current healthcare and pharmaceutical operating environments

EDUCATION

App Academy - Software Engineering   Aug 2019 - Nov 2019
1000-hour immersive full-stack web development program teaching Ruby, Rails, SQL, JS, React, TDD, algorithms, design patterns, and programming best practices

Princeton University - Bachelor of Arts, Concentration in History   June 2017
Applicable Courses: Introduction to Computer Science (Java), Calculus I, Calculus II