Lianne Bisch | Software Engineer

(203)814-8921   lannybys@gmail.com   Portfolio   LinkedIn   GitHub   Greater New York Area, NY

SKILLS: C++, Ruby, React, Redux, Rails, JavaScript, Python, SQL, MySQL, PostgreSQL, HTML5, CSS3, Node.js, Express.js, PHP, jQuery, Bash script, Heroku, Mongoose, Git, Webpack, D3, Google Maps API, MongoDB, CouchDB, Google BigQuery, BioInformatics:Stacks & Populations, Rstudio

EDUCATION:

Providence College - *BS Computer Science, Business Certificate, GPA 3.9 Summa Cum Laude*   *Sept* 2015 - May 2019
Relevant Coursework: *Database Management Systems* (data models, query development, data normalization, data integrity, query processing), *Security* (introductory cryptography, wireless network security, malware, virus simulation), *Machine Learning* (Python)
AppAcademy   Jan 2020 - June 2020
Committed over 100hrs a week to complete the immersive software development course with a focus on full-stack web development.

PROJECTS:

Open Playbill   *Ruby on Rails, ReactJS, ReduxJS, JBuilder, Google Maps API*   live | github
Pixel perfect clone of dining and reservation website OpenTable with a Broadway theme.
- Designed backend search API with pg-search gem for category-based results without additional database queries.
- Applied Google Maps API to individual Broadway show profiles in custom 'MusicalMap' React component which accepts latitude/longitude parameters from parent components and returns a map node configured for the Google Maps API for marker plotting and related functionality.
- Adapted Redux's unidirectional state management to increase speed of search result page and eliminate the need to render a new page.

Fit Challenger   *Ruby on Rails, ReactJS, Mongoose, Express*   live | github
Fitness website for users to take on fitness challenges and challenge others.
- Collaborated in a group of four as the backend manager, delegating backend DB usage and git check-ins. Administered communication with the front end manager to ensure a seamless user interface.
- Leveraged Express Router to separate different 'challenge' resources and create routes for CRUD actions.
- Incorporated Mongoose to construct schema models for 'challenges' and 'group challenges' by assigning intuitive and flexible data types to reflect the polymorphic association between 'user' and 'challenge' entities.

Is It Over Yet?   *JavaScript, D3, COVID19 API, HTML, CSS*   live | github
Data visualization that dynamically displays Covid-19 data in the form of bar charts.
- Employed external API to provide statistics by sending XMLHttp Get Requests to the Covid-19 API and parse the information for incorporation into bar graphs.
- Created a MouseOver function with transition to the DOM so a chart's bars are updated with appropriate style upon user hovering interactions
- Utilized JavaScript's DOM manipulation to create two dropdowns based on data categories and registered OnClick event listeners to filter API response objects and update which data is rendered in real-time

EXPERIENCE:

Biology Research Lab Assistant
Providence College & Fordham University   May 2018 - Aug 2019
- Utilized the terminal, bash, Bioinformatics software Stacks & Populations and Rstudio to sequence and graph 1M+ genomes in 10K+ unique rat DNA samples.
- Implemented multiple bash loops to create a template for processing genomic data resulting in a 70% increase in processing efficiency and speed.
- Constructed a detailed guide as to how to use Bioinformatics software with code templates and explicit instructions for those who do not have a coding/technical background.
- Co-authored Evolutionary Applications Manuscript on the comparative spatial genomics between mice and bats.

WDOM Radio General Manager and Program Director
Providence College   General Manager | May 2016 - Aug 2019
Social Media Ambassador
Providence College   Sept 2019 - June 2019