

CELL (516) 639-5199 E-MAIL jeremyfriedel@yahoo.com New York, NY PORTFOLIO GITHUB LINKEDIN

React, Redux, Ruby, Rails, Python, Javascript, Java, Django, C, CSS3, SQL, git, jQuery AWS, Docker, TDD, OOP, Node.js

## **PROJECTS**

**StackOverTroubledWater** (Rails, React, Redux, SQL,npm, webpack, CSS, HTML, Heroku) | *Sole Developer* | live | github | Single Page Stack Overflow clone built with a Ruby on Rails API backend and React and Redux Frontend

- Developed Redux and React single page app implemented with dynamic DOM changes to allow real-time updates without reloading the page or rendering any unchanged components of the page, dramatically shortening load times.
- Designed efficient SQL queries to transfer information efficiently from backend to frontend using a custom JBuilder JSON API customized to the requirements of the project, minimizing Rails backend load and total SQL queries by over 90%.
- Engineered user privacy through frontend and backend authentication measures using BCrypt and React Router, allowing users to only post and make changes to their own posts, comments, and answers when logged in and verified.
- Implemented answers and comments to posts to include code formatting, images, links, and other user formatting such as bold and italics with React Quille integrated into the site.

**SuperTetris19** (JavaScript, HTML5 Canvas, npm, webpack, CSS, HTML) | *Sole Developer HTML5 Canvas ES6 JavaScript clone of Tetris*.

live | github

- Developed using HTML5 Canvas with vanilla OO ES6 JavaScript to give an engaging visual and audio experience using native JavaScript.
- Engineered with separation of logic and presentation using Object Oriented ES6 classes, for upgradability and a clean codebase.
- Designed complete clone of the classic game, including modern additions such as hold and next piece preview.
- Implemented with webpack and babel configuration to serve even legacy browsers with a modern JavaScript ES6 Application reaching over 99% of users by browser market share.

GraphPie (Python, tkInter, NumPy, SciPy Matplotlib) | Sole Developer

live github

Python graphing of mathematical functions, with both a GUI and CLI to a single Python OO backend.

- Engineered cross platform compatible GUI application that runs on all three major operating systems and BSD.
- Designed to graph and compare up to 20 datasets at once on a single window.
- Implemented graphing multiple functions on the same window for easy comparison, with zoom and scale modification.
- Formulated with separation of concerns and OO design to allow both the GUI and CLI to use the same backend eliminating code duplication.

## **EXPERIENCE**

## **Congressional Web Developer**

US Congress

January 2018 - June 2018

- Engineered internal site using Ruby on Rails and Javascript for managing and streamlining constituent requests and services.
- Designed, administered and maintained constituent services website using Rails that received 50,000 visitors a day.
- Utilized Intranet Quorum database software to access and document the dozens of daily constituent services requests, including progress tracking and contact information.
- Communicate directly with over 100 constituents daily, both via phone and email to track status, including such diverse
  areas as political requests to veteran affairs, including over 30 requests for issuance or replacement of war medals as far
  back as World War II, of which over 90% of were successfully issued or replaced.
- Organized monthly town hall meetings that were attended by over 200 people.

## **FDUCATION**

Web Development - App Academy (Spring 2019)

1000 hour intensive software development training program.

**Decision Science -** Carnegie Mellon University, Winter 2017

Specialized CS Coursework: Python, Java, Principles of Computing, Algorithms and Data Structures, Advanced Programming Techniques, Computer Networks, Statistics with Python, NumPy, SciPy.