# BEN CUTLER

**CELL** (862) 206-0138      **E-MAIL** bcutler94@gmail.com      **LINKEDIN**      **GITHUB**      **PORTFOLIO SITE**

**SKILLS**  React, Redux, JavaScript, D3, jQuery, Ruby, Rails, HTML, CSS, SQL, git, TDD, OOP, SQL

## PROJECTS

**Robenhood**  (Rails, React.js, Redux, Ruby, JavaScript PostgreSQL, IEX Exchange, News API, Recharts, Webpack, Heroku)      live | github
*Revolutionary stock trading platform that provides user with a seamless investment experience*
- Optimized the sourcing of multiple real time external APIs by expertly managing the asynchronous nature of simultaneous AJAX requests within the components local state while utilizing React lifecycle method
- Efficiently performs complex mathematical algorithmic functions from transactional data for portfolio performance in minimal time complexity, allowing program to run with minimal loading lag
- Streamlines visual user interface experience by implementing beautifully crafted data visualization charts that display real time performance and pricing data
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**Monte Carlo Future Stock Price Simulator**   (D3, JavaScript, HTML5, CSS, JQuery, Webpack, IEX Exchange)      live | github
*Advanced applied statistics application that predicts future stock price behavior with the D3 data visualization library*
- Performs complex Monte Carlo simulations via Geometric Brownian Motion on externally sourced stock price datasets
- Renders visually engaging and easily digestible actionable insights by incorporating D3 data visualization library in the form of line and bar charts
- Adheres to the principles of Object Oriented Programming (OOP) with the construction of well-designed decentralized classes that allow javaScript to seamlessly interact with HTML DOM elements

**Rails Lite**   (Ruby) | *Collaboration with Mark Rodriguez*      github
*Comprehensive meta-programming project that mimics the functionality of the Ruby on Rails framework*
- Constructed functionality of Active Record by creating methods that handle cookie communication with client-side server and create routing methods that manage workflow of HTTP requests
- Built Rack Middleware to streamline error handling process by logging the stack trace, rendering a preview of pertinent source code, and providing user with descriptive exception message
- Engineered methods managing the workflow and transfer of data through the use of database queries in SQL

**JQuery Lite**   (JavaScript)      github
*Extensive frontend-heavy project that mimics the functionality of JQuery, a JavaScript library*
- Formulated class containing DOM nodes with convenient methods that allow for HTML DOM traversal, manipulation and event handling
- Developed ajax method that initializes XMLHTTPRequest (XHR) to manage external API requests and consequently returns a Promise upon success or failure

## EXPERIENCE

**University of Pennsylvania - Information Systems and Computing Department**                    2017 - 2018
Financial Analyst
- Spearheaded large project to revamp the department's outdated budgeting framework that implemented a brand new software system allowing the department to cut costs by 20% YoY
- Absorbed the work of 2 other analysts and allowed the department to save over $100k in salaries

**SEI Investments**                    2016 - 2017
Financial Analyst
- Supplied clients with vital financial and market insights with the use of advanced financial technologies such as Bloomberg, Geneva and Oracle allowing department to take on new business and increase revenues by 15% with 6 months of start date

## EDUCATION

**Web Development -** *App Academy (2019)*
- Fully immersive web development program that trains developers fluently in Ruby on Rails, SQL, JavaScript, React and Redux

**BS Education (Economics and Mathematics)**  - *University of Redlands (2016)*
- 4.0 GPA, Dean's List, National Mathematics Honors Society (ODE), National Economics Honors Society (PME), Golf team

**Chartered Financial Analyst (CFA) and Chartered Alternative Investment Analyst (CAIA)**
- Scored above 90th percentile in the notoriously rigorous CFA and CAIA Level 1 exams