



## Education

**B.A. Computer Science and Environmental Studies, New York University.**

**Sept 2013 - May 2016**

**Honors:** summa cum laude, Phi Beta Kappa, and Founders' Day Award

**GPA:** 4.00

## Technical Skills

**Languages:** Java, JavaScript (including Node.js), Ruby, Objective-C, Python, C, Processing

**Libraries and APIs:** Express, Rails, Distributed Systems and Parallel Computing Interfaces (OpenMP, Open MPI, CUDA), React/Redux, D3.js, RESTful APIs (building and consuming), RSpec, JQuery, Handlebar.js

**Databases:** PostgreSQL, MongoDB

## Experience

**PwC, Cyber Security Advisory Experienced Associate, NY.**

**Aug 2016 - Present**

- Spearheaded a data cleansing and import effort in Python, resulting in a \$40,000 net saving for the client.
- Deconstructed and developed detailed flowcharts of Java applications, all of which were key client deliverables.

**NYU, Computer Science Tutor and Course Tutor and Grader, NY.**

**May 2014 - May 2016**

- Tutored and graded over 50 students' weekly assignments and labs for Computer Systems Organization (C/x86), Introduction to Web Design (HTML/CSS), Introduction to Programming (Python).
- Developed C and Python unit tests, and utilized Valgrind to find errors and bottlenecks in students' programs.

**NYU, Teaching Assistant for Tech Focus III: "Caring for Software Based-Art" Symposium, NY.**

**Sept 2015**

- Collaborated with NYU professors to teach curators, conservationists, and artists about conserving digital art through Processing open source project, Git, and disk imaging at the Guggenheim Museum.

## Projects

**Distributed Systems and Parallel Computing Projects (C, OMP, MPI, CUDA)**

**[Github](#)**

- Implemented an algorithm to solve a group of linear equations using MPI, a program to generate prime numbers in OMP, and a program to find a maximum number in CUDA (GPU).
- The parallelized programs resulted in faster execution time than their sequential counterparts for large data sets.
- Developed detailed reports analyzing the execution time as a function of number of processes, threads and problem sizes for MPI and OMP and block and grid dimensions for CUDA.

**Simulation of Operating Systems Functions (C, Java)**

**[Github](#)**

- Developed programs to simulate a two-pass linker used in C compilation process, various process scheduling algorithms (first come first serve, round-robin with quantum 2, uniprogrammed, and shortest job first) used by the OS, resource allocation using banker's algorithm of Dijkstra, and demand paging between memory and disks.

**Cryptocurrency Visualization (D3.js, JavaScript, AJAX Polling)**

**[Live](#)**

**[Github](#)**

- Created a isomorphic mapping function which orders cryptocurrencies by market cap on a 2D coordinate system.
- Utilized AJAX polling to periodically retrieve prices of cryptocurrencies, which are then visualized as force bubbles.

**Remember to Check In (Rails, PostgreSQL, React, Redux)**

**[Live](#)**

**[Github](#)**

- Developed a single-page web application inspired by rememberthemilk.com
- Engineered robust authentication and authorization checks (2 on the frontend, 5 on the backend), so that a user must login to make AJAX requests and can only add, delete, and make changes to their own lists and tasks.

**Snack Scan (Objective-C)**

**[Demo](#)**

**[Github](#)**

- Led a 3-person team in developing an iOS application in Objective-C that allowed users to scan UPC code of grocery items to view the product's information in a pseudo-AR format. Snack Scan was featured in NYU CS Showcase for excellent execution.

**Jelly Roll (Processing, Leap Sensor Motion)**

**[Demo](#)**

**[Github](#)**

- Created a Leap Motion Sensor based game using Processing and Object Oriented Programming with a group of four people. Jelly Roll was featured in NYU CS Showcase for excellent execution.

**Adi's Dinner (Node.js, Express, MongoDB, JavaScript, Passport.js, Chart.js)**

**[Demo](#)**

**[Github](#)**

- Built a web application that allows users to suggest and vote for what Adi should eat for dinner.
- Utilized Passport.js for authentication middleware and Chart.js as a frontend visualization library.