

## Education

### New York University

3.14 GPA M.S. [Computer Science](#), May 2016

Course:

Distributed Systems

- Implemented scalable NoSQL key-value databases using the golang programming language

### University of California, Berkeley

3.01 GPA B.S. [Bioengineering](#), May 2012

Courses:

Operating Systems & Systems Programming

- Added Java code to a distributed NoSQL database that used the 2 Phase Commit protocol

Great Ideas in Computer Architecture

- Used C, OpenMP, and Intel AVX to maximize matrix multiplication speed. Implemented a MIPS CPU.

## Experience

### OpenText, Software Engineer (March 2017 to Present); San Mateo, CA

- Worked on content management systems (software used to manage and create websites).
- Was in a project where AI was used to suggest content and images to add to web pages.
- Implemented the component in a UI that fetched content suggestions from an AI service.
- Hybrid Apps Project: Wrote Java code that invokes a REST service to generate Android and iOS apps.
- Technologies primarily used: Angular 1, Java, CentOS Linux.

### HyTrust, Software Engineering Intern (Jun 2016 to Sep 2016); Mountain View, CA

- Used Python to implement programs that send summary emails to customers.
- Was part of a mission critical team that serve many government agencies and financial service companies:  
<https://www.hytrust.com/solutions/data-sovereignty/>

### E\*TRADE Financial, Software Engineer (Jul 2012 to Aug 2014); Menlo Park, CA

- Worked on the Fraud Prevention team and made programs that allow fraud analysts to visualize data.
- Created a web app (w/ Perl CGI as the backend) that allows fraud analysts to generate D3.js visualizations.
- The web app accesses log files from a Hadoop cluster and parses the log files.
- Implemented custom sorting and filtering features on scatter plot graphs with D3.js.

## Selected Projects

### Linear Regression to Predict Vaccine Usage (<http://kenluy.com/img/portfolio/vaccine.pdf>)

- Compared Google Trends data with clinical data to predict vaccine usage.
- Used Python's Scikit Learn module to generate linear regression models and do cross validation.

### School Project for Master's Degree: Distributed NoSQL Key-Value Database

- Was given part code and filled in the remaining code of a Key-Value database that is sharded and replicated.
- The db has no single point of failure because it uses Paxos to replicate data across the nodes of a shard.
- Not all nodes are responsible for all data; groups of nodes save certain shards of the data.
- Shard reorganization code allow nodes to join the db and cause the number of shards to increase.

## Languages and Technologies

Proficient: Java, Python

Exposure: JavaScript, HTML/CSS, C, Go, Git/GitHub

## Awards

3rd Place, Intuit's Hackathon at UC Berkeley (2016)

Mathematics Achievement Award, Bank of America (2007)