University of California, Berkeley Berkeley, CA
BS, Electrical Engineering and Computer Science (EECS) *August 2016 to May 2020*
Coursework: Data Structures, Discrete Mathematics and Probability Theory, Linear Algebra and Differential Equations, Structure of Computer Programs, Designing Information Systems and Devices, Multivariable Calculus

Archbishop Mitty High School San Jose, CA
Graduated with honors *August 2012 to May 2016*
GPA: 3.95. SAT: 2380. Awards: American Invitational Math Exam (AIME) qualifier, Interstellar National Math Competition Quarterfinalist, US History Bee National Championship Qualifier, St. Francis of Assisi Service Award

EXPERIENCE

Berkeley Institute for Data Science Berkeley, CA
Undergraduate Researcher – Machine Learning *September 2016 to Present*
- Used machine learning methods (clustering, random forest, regression, PCA) to identify traits of invasive species
- Used data mining methods such as web scraping (BeautifulSoup) to parse and clean publicly available species data.
- Classified over 3000 species using machine learning, reducing the need for expert analysis and manual classification
- Achieved a classification accuracy of 87% for at-risk plants in the United States, Australia, and the Pacific islands
- Integrated the ML framework with an interactive web front end to simplify and visualize the classification process

Blockchain@Berkeley Berkeley, CA
Software Developer – Blockchain *November 2016 to Present*
- Developed blockchain for supply chain and shared economy solutions using Ethereum for Airbus and City Innovate
- Used Ethereum to develop a blockchain accounting system that prevents financial fraud in large corporations

NASA Ames Advanced Studies Laboratory Mountain View and Santa Cruz, CA
Research Intern – Memristors *June 2015 to August 2015*
- Characterized and modeled the electrical features of thin film for memristive applications relating to solar energy
- Ported over obsolete technology using LabVIEW and programming to be used by modern laptops and computers
- Developed data analysis and statistical analysis methods to characterize electrical characteristics of thin film
- Automated the thin film measurement process using LabVIEW, enabling remote access of the measurement system

PROJECTS

Dorm Ex Machina – Won 1st place in Robotics@Berkeley's 2016 invention competition. Built a Arduino robotic system that uses RFID and Bluetooth technology to track whether a user has forgotten their belongings (keys, wallet, phone) in their room. Used CAD and 3D printing for rapid prototyping; created a "Find My iPhone"-like app as a hub for the user to retrieve forgotten belongings. *Github: http://bit.ly/2eqwdQH*

Where to Eat – Created a visualization of restaurant ratings in Python using machine learning and the Yelp academic dataset to predict favorite restaurants. Used k-means clustering and a Voronoi diagram to visually group restaurants based on common features. Used simple least-squares regression to predict user ratings for similar restaurants based on the ratings they gave to previous restaurants. *Github: http://bit.ly/2f5rQv9*

Scheme Interpreter – Created a Scheme interpreter using Python. The interpreter is able to understand and compute linked lists, tail call optimization, and streams in addition to the fundamental Scheme features. Implemented a read-eval-print loop, tokenization, dynamic and lexical scoping. *Github: http://bit.ly/2h6IZ8b*

EXTRACURRICULAR ACTIVITIES

Phi Beta Lambda – *Web Development Project Manager* Berkeley, CA, *September 2016 to Present*
- Conducted market research on over 100 members in order to formulate targeted tech solutions for club operations.
- Created a bot on Facebook Messenger that pairs users up anonymously for spotaneous social interactions.
- Worked on a project team of 8 to create web-based solutions such as a custom-built wiki and user portal

Sacred Heart Community Service – *Volunteer Organizer* San Jose, CA, *August 2012 to May 2016*
- Organized the Pack-a-Back school supply drive for 2,800 low-income elementary school students in Santa Clara County
- Assisted Mandarin-speaking families in applying for services, Prepared and distributed food to families in need.

SKILLS & QUALIFICATIONS

Skilled – Python, Java, Ruby on Rails, HTML, CSS, Javascript, SQL, Scheme, LaTex, Git, CAD, Ethereum, Solidity, Mandarin Chinese
Proficient – PostgreSQL, Lisp, LabVIEW