
Education

University of California, Berkeley

Berkeley, CA

*BS, Electrical Engineering and Computer Science (EECS)**August 2016 to May 2020*

Coursework: Data Structures, Discrete Mathematics, Probability Theory, Linear Algebra, Differential Equations, Introduction to CS, Designing Information Systems and Devices, Multivariable Calculus

Experience

Berkeley Institute for Data Science

Berkeley, CA

*Software Engineer**September 2016 to Present*

- Used machine learning (clustering, random forest, regression, PCA) to identify traits of invasive species
- Built webapp using Django to allow users to upload their own datasets and use the ML model
- Worked on full stack using CSS, HTML, Python, jQuery, ajax, REST to create web app
- Classified 3000 species, achieved a classification accuracy of 87% for at-risk plants

Berkeley Laboratory for Automation

Berkeley, CA

*Linux Systems Administrator & Web Developer**February 2017 to Present*

- Worked under Prof. Ken Goldberg to maintain 28 websites and web projects on a web server
- Used Linux, Apache, MySQL, PHP (LAMP) to maintain websites, built 2 websites using WordPress
- Worked with basic networking, IP configuration, SSH, and network security

Blockchain@Berkeley

Berkeley, CA

*Software Developer – Blockchain**November 2016 to February 2017*

- Developed supply chain and shared economy blockchain solutions using Ethereum for Airbus and Ford
- Used Ethereum to develop a blockchain accounting system that prevents financial fraud in corporations

Projects

Pablo, The Messenger Bot

- A Facebook Messenger bot that allows users to have anonymous conversations with others through it
- Deployed on DigitalOcean virtual server, used Ruby and Rails as language and framework
- Used Facebook API to integrate Ruby backend with webhook
- Wrote algorithm that made calls to access users based on unique IDs and pair them pseudorandomly
- Allows administrators to mass-send casual updates to all bot subscribers
- Syncs with a user's weekly schedule to automatically send individualized reminders about events

Dorm Ex Machina*Github: [git.io/vyfyf](https://github.com/vyfyf)*

- Arduino system that uses RFID and Bluetooth to track whether a user has forgotten their belongings
- Created a "Find My iPhone"-like app as a hub for the user to retrieve forgotten belongings
- Won 1st place in Robotics@Berkeley's 2016 invention competition. Video: bit.ly/2fYhVmH

Where to Eat*Github: [git.io/vyfyR](https://github.com/vyfyR)*

- Uses machine learning and the Yelp academic dataset to predict favorite restaurants, shows visualization
- Used k-means clustering and a Voronoi diagram to visually group restaurants based on common features
- Predicted user ratings for similar restaurants based on previous ratings

Skills and Qualifications

Experienced – Python, Java, Ruby, Rails, HTML, CSS, Javascript, SQL, LaTeX, Git, Django, jQuery, Node.js, MongoDB, AngularJS, PHP, LAMP stack, MEAN stack, Mandarin Chinese

Proficient – PostgreSQL, Lisp, Ethereum, Solidity, LabVIEW