

Education

2012–2016 **Computer Science and Applied Mathematics**, *University of California, Berkeley*.
GPA: 3.77. Expected Graduation Date: December 2016.

Relevant Courses.

Algorithms (Graduate), Machine Learning, Artificial Intelligence, Data Structures, Machine Structures, Multivariable Calculus, Linear Algebra, Discrete Mathematics, Abstract Algebra, Database Systems, Computer Graphics, Real/Complex/Numerical Analysis.

Technical skills

Java, C, Python, R, MATLAB, SQL, Hive, HBase, LaTeX, Unix.

Experience

Work Experience

Summer **Network Analytics Intern**, Qualcomm.

2016 Applied Machine Learning and Network Graph Analysis to enhance existing analytics work. Developed a graph based method for modeling telecom network data to support network analytics. This included device profiling, cell tower clustering, and the creation of a total network profile. This new approach supports comparative analysis, outage and fraud detection, and event site recognition through mobility patterns.

Summer **Data Analytics Intern**, if(we).

2015 Worked on the Big Data team at a social networking company based in San Francisco. Developed functions for Hive to more efficiently manipulate large tables stored in HBase. Analyzed a probabilistic data structure to increase accuracy of Daily Active User counts from 95% to 99%.

Research

2014–2015 **Undergraduate Researcher**, *Artificial Intelligence*, UC Berkeley.

Worked under Prof. Stuart Russell and built Monte Carlo Markov Models to more accurately model the intracranial pressure of patients of traumatic head injuries in the ICU. The goal is to significantly decrease the number of false alarms for dangerous readings to better treat patients.

Projects

Decision Trees and Random Forests.

Developed a machine learning program which implements decision trees and random forest algorithms to predict unknown labels for current housing data from the 2015 Census. Added implementations of Bagging, Pruning, and AdaBoost.

Spam Classification.

Implemented a support vector machine, ridge regression, logistic regression, linear discriminant analysis, and quadratic discriminant analysis classifiers (separately) to tackle the problem of detecting spam messages. All functions and algorithms uses were completely written from scratch.

Digit Classification.

Implemented a single layered neural network to create a digit classifier. Using both stochastic and batch gradient descent, the training error decreased 1%, and the testing error was 3%.

Extra Curricular Activities

Improv 4 Charity, Vagina Monologues @ UC Berkeley, Outdoor Exploration