

EDUCATION

Berkeley, CA	University of California, Berkeley	Fall 2012 – Summer 2017
<ul style="list-style-type: none">• B.A. in Computer Science, August 2017.• B.A. in Statistics, August 2017.• Coursework: Algorithms, Databases, Web Arch, Data Structures, Computer Arch, Machine Learning, Data Mining, Artificial Intelligence, Data Science, Probability, Statistics, Sampling Surveys, User Interface Design		

WORK EXPERIENCE

Head Teaching Assistant	UC Berkeley, EECS Department	Summer 2017
<ul style="list-style-type: none">• Led team of 12 TAs to teach CS 61C - Computer Architecture and Machine Structures to 230 students.• Received performance rating of 4.6/5.0, significantly higher than department's 4.2 average.• Wrote midterm and final exam questions, and directed two rounds of staff pretesting.• Created new Caches project, including autograder (Python), spec (Bootstrap), and skeleton/solution (C).		
Software Engineer, Intern	Riviera Partners	Summer 2016
<ul style="list-style-type: none">• Created Python machine learning models to classify a job candidate's value with 80% accuracy.• Embedded models into web app for production use with Python's Flask.• Performed sentiment analysis with Python's NLTK to improve recruiter efficiency when evaluating candidates.• Established A/B test to increase candidate responsiveness using email versus text.		
Software Engineer, Intern	MobiTV	Summer 2015
<ul style="list-style-type: none">• Created internal tools with Bash and Python to automate KPI reporting.• Reduced backend logging validation runtime by 75% by refactoring SQL code.• Built data pipelines for Tableau reports by querying MySQL and Google BigQuery databases.• Conducted statistical tests in R to extract features that boost viewer retention rate.		

PROJECTS

TrackStream: github.com/Zubair-Marediya/TrackStream

A web app to identify songs in a movie or TV show and display their Youtube videos.

- Constructed backend server and database using Node and connected them to TuneFind and Youtube APIs.
- Created API from scratch to support backend, front end queries, and future project development.

Percolator: github.com/Zubair-Marediya/Percolator

A Chrome plugin that uses NLP to recommend political articles outside your bubble.

- Implemented dynamic front end components with JavaScript and saved state with local storage cache.
- Connected predictive models to backend by deploying Python processes on Node server.

Text Classification: github.com/Zubair-Marediya/TextClassification

A classifier that labels Project Gutenberg excerpts as Children, History, Science, or Religion.

- Predicted with 94% accuracy and placed 3rd on Kaggle using Random Forests, SVMs, & Boosting in Python & R.
- Optimized feature lookup using binary search and reduced feature space with Principal Component Analysis.

Caches: github.com/Zubair-Marediya/Caches

A new project on Cache implementation, optimization, and coherency for CS 61C.

- Wrote hidden unit and integration test suites in CUnit to hit 97% code coverage, and released sample tests.
- Built autograder in Python using XML parsing with BeautifulSoup on CUnit and Valgrind output.

Languages and Technologies

- Python, Java, C, SQL, HTML, CSS, JavaScript, R, Matlab
- Node, jQuery, Bootstrap, Flask, Git, UNIX, JSON, XML, Spark, Hadoop
- Scikit-learn, Pandas, NumPy, SciPy, Matplotlib, Seaborn, ggplot2