

EDUCATION

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|---|---|--------------------------------|
| 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

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| 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