

Mason Dochterman

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Education

University of California, Berkeley | Berkeley, CA
B.A in Computer Science, Music minor

Expected Graduation: December 2020
Major GPA: 3.50 (Regents and Chancellor's Scholar)

Relevant Coursework

CS61A (Structure and Interpretation of Computer Programs), CS61B (Data Structures), CS70 (Discrete Mathematics and Probability Theory), CS198 (Introduction to Machine Learning), EE16A (Designing Information Devices and Systems I), EE16B (Designing Information Devices and Systems II)

Professional Experience

Curtail Security

Santa Barbara, CA

Software Engineering/Data Analysis Intern

May 2018 – August 2018

- Used SQL to identify patterns and outliers in a network traffic data set with over 65 million points
- Single-handedly managed an entire client project and developed a comprehensive report by the end of August
- Developed an automated program using Python to visually model large data sets using different points of interest
- Used Poisson and Gamma distributions and other modeling techniques to develop visual data representations

Leadership and Extracurriculars

Political Computer Science @ Berkeley

Berkeley, CA

Android Development Project Manager

January 2018 - Current

- Developing an Android application designed to display relevant information regarding bills in Congress
- Managing a team of 8 members and overseeing weekly project meetings and development sessions
- Began development for an Ethereum-based voting application designed to decrease voter fraud and increase security
- Co-authored a paper investigating the use/efficacy of blockchain technology in international government

UpSync Consulting

Berkeley, CA

Tech Design Committee Member

September 2018 - Current

- Interfacing with a mobile payment company to reconstruct their mobile application's user interface
- Using Swift to remove redundancy within the design and to create new features that will improve user experience
- Meeting with company executives to discuss new design elements and functionality of the application

Dos Pueblos Engineering Academy

Goleta, CA

Console Manager

August 2013 – May 2017

- Programmed an interactive and educational "physics arcade" that was displayed at the 2017 Maker Faire
- Used C++ to program algorithms that control autosolving ball mazes, self-correcting inverted pendulums
- Used JavaScript to program an interactive UI that integrates introductory physics concepts with hardware control
- Received multiple Editor's Choice first-prize awards as part of a larger educational physics display

Dos Pueblos Engineering Academy

Goleta, CA

Web Content Team Leader

August 2014 – May 2017

- Maintained the Dos Pueblos Engineering Academy website using Drupal, a content management system
- Created and edited ~5 additional web pages using HTML/CSS that were used to display updated content
- Coordinated website content and discussed development ideas with Engineering Academy staff members

FIRST Robotics

Goleta, CA

Tech Challenge Team Co-Founder

August 2015 – January 2017

- Constructed and programmed a semi-autonomous robot to compete in tournaments across California
- Used collision detection algorithms to control the robot's direction and navigate it safely through the game field
- Completed extensive administrative work and raised around \$1,000 to found our independent rookie team
- Engaged with our local community through multiple outreach activities to recruit new members

Skills and Interests

Skills: Comprehensive knowledge of Word/Excel, excellent communication/project management skills

Technical Skills: Java, Python, SQL, PGAdmin, Dart, Flutter, TCP/IP Protocol, Swift

Interests: Music Computing using Max 7, Data Analysis, Machine Learning