

EDUCATION

University of California, Berkeley, Berkeley, CA

Bachelor of Science, Electrical Engineering and Computer Science, May 2021

GPA: 3.84

Tesoro High School, Las Flores, CA

Diploma, June 2017

GPA: 4.0 (unweighted); National Merit Finalist, National Merit Scholar, National AP Scholar, Eagle Scout

RELEVANT COURSEWORK

- Fall 2017: Structure and Interpretation of Computer Programs (CS 61A), Designing Information Devices and Systems I (EE 16A), Multivariable Calculus (Math 53)
- Spring 2018: Data Structures (CS 61B), Designing Information Devices and Systems II (EE 16B)
- High School: AP Computer Science, AP Physics C: Mechanics, AP Statistics, AP Calculus BC

LANGUAGES

- Python, Java, SQL, HTML5, CSS3, JavaScript, Scheme

PROJECTS

- Used Java to develop a random world generation algorithm which I used to create a 2D game. The game allows players to save progress, and reads both mouse and keyboard input to control player movement and a heads-up display. I also incorporated gameplay mechanics such as lives, levels, and upgrades.
- Used Python to implement a fully functional interpreter for the Scheme programming language. Ensured that evaluation was properly tail recursive.
- Programmed a tower defense game based on Plants vs Zombies called “Ants vs. SomeBees” in Python. Project utilized functional and object-oriented programming paradigms.
- Implemented an application to create a Voronoi diagram visualization of nearby restaurants and their ratings using the Yelp academic dataset in Python. Application used machine learning techniques to predict restaurant ratings.

EXPERIENCE

BrainStorm STEM Education, June 12 – August 4, 2017

I worked full time and co-taught four 3-week courses at public schools in Irvine, CA. I interacted with parents and students on a daily basis, and taught basic block programming, 3D modeling, Arduino, and robotics.

COSMOS (California State Summer School for Math and Science), July 10 – August 5, 2016

I participated on a project team at UC Irvine with three other high school students under Professor Martin Jaroszewicz. We designed, developed, and demonstrated an iOS virtual museum application incorporating 3D sound using Swift 2.2.