

# David Chang

Seattle, WA, 98195 | (408) 560-6268 | [changd8@uw.edu](mailto:changd8@uw.edu) | <https://davidbchang.netlify.app> | [linkedin.com/in/changdavidb](https://www.linkedin.com/in/changdavidb)

---

## EDUCATION

**University of Washington**, Seattle, WA

### Related Courses:

BS in Computer Science

Data Structures and Parallelism

Minor in Mathematics

Software Design and Implementation

GPA: 3.73/4.00 (Dean's List)

Advanced Multivariable Calculus

Expected Graduation: June 2022

Matrix Algebra with Applications

---

## SKILLS

**Programming Languages:** Python, Numpy, Java, C, Matlab, HTML, CSS, Javascript

**Experience with:** React, Gatsby.js, Spark Java, JUnit, Git

**Labs:** Soldering

---

## EXPERIENCE

### Mobile Application Development Project - Fitness App

June 2020 – Present

A powerlifting training log app for Android and iOS using React Native and Spark Java.

- Designed a seamless user interface that allows users to create their own training programs by implementing client-server and event-driven programming
- Uses model-view-controller to program front-end and back-end designs that interact with a database
- Beta-tested with 4 people and allows users to create and save their training programs
- Next: enabling users to share their programs with each other

### Image Processing Research, Seattle, WA

January 2019 – June 2019

*Undergraduate research, Professor: Ligu Wang*

Image processing for determining of 3-dimensional structures of proteins.

- Preprocessed and filtered images of vesicle data from a cryo-electron microscopy file format using Matlab
- Reconstructed the 3-dimensional structure of proteins from multiple 2-dimensional images by removing the lipid vesicles of varying sizes
- Refactored 36 programs from Matlab to Numpy

### NASA Student Launch, Irvine, CA

June 2016 – April 2018

*Payload Manager*

Implemented the payload, air brake and recovery systems of a recoverable and reusable rocket

- Placed fifth at Team America Rocketry Challenge
- Qualified to compete in NASA Student Launch (top 25 teams in the nation)
- Won best website award in the high school division
- Designed and built a CO2 sensor electronic control board using Arduino
- Programmed and built an autonomous air brake system on the rocket
- Wrote the statement of work and four design reports every other month with a team of 6

---

## ACTIVITIES

### University of Washington EcoReps (member)

January 2019 – present

- Supported local producers and sustainable food practices at the Green Husky Market at the University of Washington
-