# Cory Chilton

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Website GitHub

#### **EDUCATION**

# University of California, Los Angeles

B.S. in Mechanical Engineering

September 2019 - June 2023

- GPA: 4.00, Summa Cum Laude
- Technical Breadth in Computer Science

# EMPLOYMENT

## The Aerospace Corporation

Technical Intern (Software)

June 2022 - September 2022

- Developed scripts in Python to automate the post-flight workflow
- Enhanced Python script performance by 57% using multiprocessing
- Debugged old scripts to generate an updated post-flight report for an important mission
- Plotted response spectra to exhibit key differences between post-flight reports and models

#### Serve Robotics

Mechanical Engineering Intern

June 2021 - September 2021

- Designed and prototyped parts to go on a food delivery robot
- Tracked issues using Jira

# **PROJECTS**

View the source code and READMEs on my github.

#### carl-shop

Ecommerce website

- Built from scratch using a React front-end on the Next.js framework
- Utilized TailwindCSS for styling with a mobile-friendly approach
- Currently working to add back-end functionality

# corychilton.github.io

Personal website

• Built from scratch using vanilla HTML, CSS, and Javascript

#### Connect-N

Computer Game

- Coded in C++ using objected-oriented programming
- Play against a friend or against a bot that always plays perfectly

#### Sorting-Visualize

Interactive Module

- Developed using the Pygame module in Python
- Shows how commonly used sorting algorithms sort data

# juice-box-robot

**Autonomous Robot** 

- Programmed in Arduino (based in C++)
- Autonomously transports a juice box through an obstacle course

## **COVID-Modeling**

**Graphical Model** 

- Coded using MATLAB
- Simulates the spread of COVID using a susceptible, infected, recovered model

## COURSEWORK

- Object-Oriented Programming and Data Structures (C++)
- Algorithms
- Discrete Structures
- Introduction to Computer Science (C++)

## **SKILLS**

- Python	$\bullet \bullet \bullet \bullet \circ \bigcirc$
- HTML	$\bullet \bullet \bullet \bullet \bullet \bigcirc$
- TailwindCSS	$\bullet \bullet \bullet \bullet \bullet \bigcirc$
- JavaScript	$\bullet \bullet \bullet \bullet \bigcirc \bigcirc$
- React	$\bullet \bullet \bullet \bullet \bigcirc \bigcirc$
- CSS	$\bullet \bullet \bullet \bullet \bigcirc \bigcirc$
- MATLAB	$\bullet \bullet \bullet \bullet \bigcirc \bigcirc$
- C++	$\bullet \bullet \bullet \bigcirc \bigcirc \bigcirc$
- TypeScript	$\bullet \bullet \bullet \bigcirc \bigcirc \bigcirc$
- Next.js	$\bullet \bullet \bullet \bigcirc \bigcirc \bigcirc$
- Arduino	$\bullet \bullet \bullet \bigcirc \bigcirc \bigcirc$
- Git	$\bullet \bullet \bullet \bigcirc \bigcirc \bigcirc$
- Jira	$\bullet \bullet \bullet \bigcirc \bigcirc \bigcirc$
- Node.js	$\bullet \bullet \circ \circ \circ \circ$
- Java	$\bullet \bullet \circ \circ \circ \circ$
- LaTeX	$\bullet \bullet \circ \circ \circ \circ$

# **ENGINEERING**

# Bruin Racing Formula SAE

- Chassis Design & Manufacturing
- Designed and performed FEA analysis on a completely new chassis using SolidWorks and NX
- Integrated the chassis with adjacent subsystems

#### VOLUNTEERING

• AYSO: Soccer Referee (2013-2017)

## ACTIVITIES

- UCLA club spikeball president and ski team member
- Intramural soccer, volleyball, and tennis