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

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

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| - Python | $\bullet \bullet \bullet \bullet \bullet \bigcirc$ |
|---------------|--|
| - HTML | $\bullet \bullet \bullet \bullet \circ \bigcirc$ |
| - 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 | $\bullet \bullet \bullet \bigcirc \bigcirc \bigcirc$ |
| - 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 Lead
- 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