## SELENA ZHANG

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#### **EDUCATION**

# College of Engineering, Cornell University

Ithaca, NY

Bachelor of Science in Electrical and Computer Engineering

Aug 2023 - May 2027

**Relevant Coursework:** Embedded Systems, Digital Logic and Computer Organization, Introduction to Circuits, Object-Oriented Programming and Data Structures, Probability and Inference, Data Science for Engineers

## PROFESSIONAL EXPERIENCE

Integra Energy Latham, NY

Summer Software Coordinator Intern

Jul 2024 - Aug 2024

- Collaborated with software development team to resolve data entry discrepancies by auditing the EV charging station portal documentation against real-world functionality, improving reliability for both site owner and company use
- Analyzed charging patterns from residential community EV stations, comparing weekly session data and usage trends to that of car dealership charging stations, concluding that residential stations offered higher long-term engagement potential

# **Cornell University Autonomous Drone Team**

**Cornell University** 

Electrical Engineer

Feb 2024 - present

- Performed precision soldering to facilitate power distribution and component integration for custom high-speed drone
- Revised LiDAR code from I2C to PWM communication protocols and running tests with Arduino and Mission Planner
- Crimped wires to for clean connection between drones' flight controller and LiDAR and GPS components
- Soldered battery-motor assemblies in series to collect vibration data, developing strategies to minimize motor vibrations

#### **Cornell Computing & Information Science**

**Cornell University** 

Consultant for CS1110: Intro to Computing

Aug 2024 – present

- Guided students through debugging processes and developing problem-solving strategies during labs and office hours
- Grade assignments and exams, providing constructive feedback to improve students' understanding of course material

**Carson City Hall**Summer Intern, Public Safety Department

Carson, CA Jul 2022 – Aug 2022, Jul 2023 - Aug 2023

• Proposed updated department website design with Figma wireframes to help citizens more easily access resources

• Collaborated with staff to design and develop public safety infographics for distribution at Carson's Public Safety Fair

#### **EXTRACURRICULARS**

## Society of Asian Scientists and Engineers (SASE)

**Cornell University** 

Finance Chair

Aug 2024 - present

- Obtained \$1500 of funding to fully support trip to SASE Nationals within one month of being a new chapter at Cornell
- Conducted monthly review of account transactions and adjust budget plans and event registration for future semesters

## **Institute of Electrical and Electronics Engineers (IEEE)**

**Cornell University** 

Treasurer (current), Publicity Committee

- Sep 2024 present
- Assisting in migrating the website to a new platform on WordPress by co-designing and implementing a new layout
- Create eye-catching publicity material for school-wide engineering events and designed the semester's IEEE stickers

# Personal Website

Los Angeles, CA

https://heyselena.me/projects.php

Mar 2020 - Jun 2023

- Employed HTML, CSS, and JavaScript to code and design a website for showcasing personal interest in art and baking
- Leveraged knowledge of SQL Databases to store my various passion projects and display them in different formats

# Girls Code It

Los Angeles, CA Mar 2020 - Jun 2023

Programming Volunteer

- Executed in-depth industry research to prepare presentations covering basic programming skills and careers in STEM
- Co-led Python workshops of 15+ attendees to reinforce and teach programming basics for groups such as the Girl Scouts

#### **First Robotics Competition (FRC)**

Carson, CA

Programmer

- Sep 2020 May 2022
- Led a sub-group to evaluate game manual and strategize precision and minimum cycle time for the year's competition
- Optimized shooter robots' accuracy through Logger Pro video analysis to inform and modify the robot code in Java **SKILLS**

**Languages:** Python (NumPy, Tkinter, Turtle), Java, Verilog, C++, HTML/CSS, SQL and SQL Databases (MySQL) **Technical:** FPGA Analysis, Arduino, Git, Soldering/Crimping, Microsoft Excel (Data Manipulation, VLOOKUP), Microsoft Word, Adobe Creative Suite (Photoshop, Illustrator, Premiere), Google Suite (Google Docs, Sheets, Slides)