

# Annie Li

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## EDUCATION

### Texas A&M University

May 2027

*Bachelor of Science in Electrical Engineering, Minor in Graphic Design & Mathematics*

- Craig and Galen Brown Engineering Honors
- Coursework: Digital Systems Design, Electrical Circuit Theory, Computer Architecture, Machine Learning

## SKILLS

**Languages:** Python, C/C++, Verilog, SystemVerilog, JavaScript, HTML/CSS

**Softwares:** Cadence Allegro, Vivado, MATLAB

## EXPERIENCE

### Hewlett Packard Enterprise

Houston, TX

*Electrical Hardware Engineering Intern*

May 2025 – August 2025

- Reworked critical component on hardware module by referencing **Cadence Allegro** schematics and performing precision soldering, followed by **I2C** power sequence and functionality scripting
- Implemented fault detection logic and scan chain-based bus communication on a CPLD with **SystemVerilog**, allowing for efficient testability

### Secure and Trustworthy Hardware Lab

College Station, TX

*Undergraduate Research Assistant*

March 2024 – Present

- Developed design-automation hardware fuzzing algorithms to ensure trustworthiness of programs with C++, achieving **1.98x** speed of industry-standard approaches
- Designed and implemented hardware vulnerabilities based on real-world scenarios into **Verilog** system-on-chip designs for capture-the-flag competition Hack@DAC 2024

### Texas A&M Health Science Center

Houston, TX

*Research Assistant*

June 2024 – July 2024

- Developed a QRS complex detection algorithm to automate electrocardiographic data analysis with **MATLAB**

## PROJECTS

### Tritone

November 2024

- Built IoT system leveraging **ESP32** and WebSockets to provide real-time local speech transcription and speaker directionality indicators with **C++** and **Python**
- Integrated dynamic distance-based audio filtering to ensure consistent performance in diverse scenarios

### Traffic Light Controller

April 2024

- Developed traffic light state machine to recognize sensor input and react to timing conditionals with **Verilog**
- Tested and verified functionality by implementing design onto an FPGA board, utilizing Xilinx **Vivado** synthesis and LEDs to display output

## ACTIVITIES

### TAMUhack

November 2023 – Present

*Creative Lead*

- Led team of designers in developing a strong visual identity and marketing materials for hackathons with **800+** attendees, leading to a **17%** year-on-year increase in applications from diverse fields of technology
- Designed 3 user-friendly and visually appealing event websites to engage a diverse audience of **10,000+** users

### Institute of Electrical and Electronics Engineers

August 2024 – Present

*Public Relations Chair*

- Directed creative strategy and external communication for career and social events throughout the year, including the first IEEE student-led Semiconductor Summit with **500+** attendees