Grace Tang

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EDUCATION

Bachelor of Science, Electrical and Computer Engineering, Computer Science Minor, Cornell University, Ithaca NY **GPA: 3.8,** ***Spring 2025***

Master of Engineering, Electrical and Computer Engineering, Cornell University, Ithaca NY ***Fall 2025***

RELEVANT COURSEWORK (*in progress)

- *Power Electronics, *HL Digital Design Automation, *Data Center Architecture
- Computer Architecture, Embedded Operating Systems, Design using Microcontrollers Intro to Digital VLSI Design, Foundations of Robotics, Machine Learning

TECHNICAL SKILLS

- Altium/KiCAD PCB design for manufacturing/assembly, Microcontroller/Raspberry Pi, Cadence circuit design
- Linux, Python, C/C++, Verilog, MATLAB, Java

PROFESSIONAL EXPERIENCE

Rev Ithaca Startup Works, Ithaca NY | Hardware Consultant ***Spring 2024 - Winter 2024, Summer 2025***

- Provide electrical hardware support for startups for the various Hardware Accelerator Programs;
- Updated PCB **designs for manufacturing**, designed electrical systems for various prototypes from the ground up, including a wall climbing robot, smart composter, and electronic kid's toy
- **Worked with PCB design, microcontrollers/Raspberry Pi, DC/servo motors, sensors, and power distribution;**

Nuro, Mountain View CA | Hardware Intern ***Summer 2024***

- Designed PCB to interface with an SSD for an **autonomous vehicle** application. **Outlining functional spec, schematic design, PCB layout, validation.**
- Validation testing (power system and SPI communication) and working with Nvidia Jetson; Gained familiarity with **high-speed signal design** with **PCIe and NVMe**

Hughes Network Systems, Gaithersburg MD | Hardware Intern ***Summer 2023***

- Conducted **verification** testing for modem boards; **Familiarity with schematics, PCB files, BOMs, as well as electronics test equipment**
- Investigated Interplay, a low code AI platform; Built a computer vision-based fire detection app

NIST, Gaithersburg MD | Research Intern ***Summer 2022***

- Analyzed data to determine ideal processing methods for OFETs; Evaluated device structure using basic image processing; **developed MATLAB programs to calculate/compare parameters**

PROJECT TEAMS

ChipSat Team, Cornell Space Systems Design Studio ***Fall 2021-Present***

- Worked with a team to design ChipSat (chip-sized satellites) for the Alpha CubeSat and DeSCENT missions
- ChipSat antenna design (reading Smith Charts, using a VNA, basic RF knowledge)
  - Created project proposal and received funding $1500;
- ChipSat assembly and prototyping (circuits/PCB design in aerospace application)
  - Alpha Publication: https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=6209&context=smallsat
  - DeSCENT Publication: https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=6169&context=smallsat

Cornell Autoboat E-Systems Subteam ***Spring 2023-Spring 2025***

- Designed boat electrical systems (power systems, ethernet, sensors/motors, using Jetson computer and Raspberry Pi Pico/Arduino microcontrollers) for Roboboat Competition, managed onboarding/recruiting new members
  - Designed a power over ethernet board for the onboard radio, led microcontroller integration

AWARDS

- Bill Nye '77 Award in Undergraduate Research, Fall 2022, Spring 2023
- Cornell Dean's Honor List, 2021-2025