Justin Ng

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Education Bachelor of Computer Engineering - 4.0 Current GPA

University of Michigan, Class of 2024

Coursework: EECS 467 Autonomous Robotics, EECS 461 Embedded Control Systems, EECS 373 Embedded Systems, EECS 442 Computer Vision, EECS 370 Computer Organization, EECS 281 Data Structures and Algorithms, EECS 270 Logic Design

Experience Robotics Electronics Intern

(May-Aug 2021)

Government Technology Agency, Singapore

- Programmed a programmable logic controller for use in the control system of an autonomous trolley collection vehicle deployed at Singapore Changi Airport
- Implemented a touch screen interface for system monitoring and user control
- Designed and built power circuitry for vehicle electronics

Undergraduate Robotics Researcher

(Jan 2022-ongoing)

Multi-legged Robots and Animal Motion, University of Michigan

- Designed flight electronics for a custom micro quadcopter drone
- Programmed quadcopter flight controller simulation in Python

Front-End Web Developer Intern

(May-Aug 2022)

Government Technology Agency, Singapore

- Developed dynamic, mobile-ready webpages using React JS
- Implemented features to support data logging and aggregation from IoT enabled devices at Gardens by the Bay Singapore
- Collaborated with back-end developers to design RESTful API services

Embedded Hardware Team Member

(Sep-Dec 2021)

Michigan Mars Rover, University of Michigan

 Designed and manufactured printed circuit boards (PCBs) for power distribution and sensor data collection in a robot to compete in the University Rover Challenge

Residential Advisor

Michigan Housing, University of Michigan

(Aug 2022-ongoing)

 Fostered diverse and inclusive living communities for first-year undergraduate students through event planning, resident engagement, and on-duty rotations

Awards Michigan Engineering Dean's Honor List

(Fall 21, Winter 22)

Skills

- C++, Python, JavaScript, Structured Text, Verilog, Matlab
- Embedded C programming on STM32
- Computer Vision with PyTorch
- Team Collaboration using Git, Jira