CALVIN HUANG

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EDUCATION

University of Michigan   **Ann Arbor, MI**
BSE Computer Science, expected May 2022   *September 2018 – Present*
GPA: 3.824
Courses: Data Structures and Algorithms (EECS 281), Database Systems (EECS 484), Computer Organization and Architecture (EECS 370), Web Systems (EECS 485), Linear Algebra (Math 214)

Jiao Tong University   **Shanghai, China**
Study Abroad at Joint Institute with the University of Michigan   *June 2019 – August 2019*

PROJECT EXPERIENCE

Do-It-Yourself Geiger-Mueller Smart Detector Research Project   **Ann Arbor, MI**
Research Assistant, Dr. Kimberlee Kearfott   *September 2019 – Present*

- Designed accessible, self-assembled radiation detectors for high school students to promote interest in engineering and STEM fields
- Developed iOS and Android apps and heat map interface for tracking radiation data collected by Raspberry Pi computers in student-built radiation detectors

Independent Robotic Arm   **Cincinnati, OH**
Head Engineer   *March 2019 – Present*

- Constructed automated 6-axis, 3-D printed robotic arm to perform sorting tasks in a small workspace
- Created Windows desktop application to interface with microcontrollers to store data used to automate the robotic arm

Remote Operated Vehicle   **Ann Arbor, MI**
Circuit and Controls Engineer   *January 2019 – May 2019*

- Prototyped and built underwater ROV design for offshore pipeline inspection that scored second highest out of a dozen teams in a simulated inspection
- Optimized custom software to simplify user interface and increase maneuverability by automatically synchronizing thrusters

MRover Project Team   **Ann Arbor, MI**
Computer Vision and Robotic Arm Engineer   *September 2018 – Present*

- Implemented AR tag detection algorithm using OpenCV for find-and-identify task in the University Rover Challenge
- Presented professional design reviews to interface with electrical sub-team to equip robot finger tools for precise tasks

EXTRACURRICULARS

Detroit Education Society   **Ann Arbor, MI**
Curriculum Designer/Mentor   *April 2019 – Present*

- Organized curriculum with team of four students for SAT/ACT tutoring program for Detroit students
- Tutored class of fifteen high school students in math and science over an online classroom in preparation for standardized tests

3D Printing Club   **Ann Arbor, MI**
Maintenance Assistant   *September 2019 – Present*

- Assembled and maintained 3-D printers for college-wide use by club members
- Implemented online server with maintenance team to expedite the model uploading process for members

SKILLS

Programming/Markup: Java/C#, C/C++, MATLAB, Python, Swift, LaTex, Markdown, HTML/CSS, React JS, Flask, OpenCV, Oracle SQL
Machine Shop Training: SOLIDWORKS, Siemens NX, Ultimaker Cura, Mill/Lathe, Respirator

HONORS AND AWARDS

University of Michigan Dean's Honor Roll   *December 2018 – Present*
Tau Beta Pi Michigan Gamma Chapter Active   *September 2019 – Present*
Eta Kappa Nu Beta-Epsilon Chapter Electee   *January 2019 – Present*