Joseph Fong

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SUMMARY

Third-year Computer Engineering Student pursuing internships in electronics industry to gain hands on exposure to skills related to my studies and find a company where I can produce meaningful results.

EDUCATION

The Ohio State University, Columbus, Ohio **B.S.** Computer Engineering

SKILLS

- High level programming languages Java, C, C++, and Python
- System level programming with Assembly, Embedded C, and Arduino
- Hardware description languages VHDL and System Verilog
- Project/coursework in CAD, MATLAB, Digital Logic, Operating Systems, and Computer Architecture
- Laboratory experience with Oscilloscope, DMM, Function Generator, Spectrum Analyzer, and TopSpice

WORK EXPERIENCE

Annapolis Microsystems, Annapolis, Maryland Test Engineer Co-op

- Design and Product Verification Testing, implemented test plans for FPGA-based systems to verify functionality, and ensure compliance with agreed design specifications
- Loaded and configured Linux environments and performed product setup for customer deployments
- Utilized MATLAB to automate testing for DSP / RF boards speeding up testing procedures
- Used Xilinx Vivado JTAG programming tools and Integrated Logic Analyzer to load/test example images

Eschweiler & Potashnik LLC, Akron, Ohio

Patent Engineer Intern

- Prosecuted ~\$35,000 in patents for tech clients TSMC and Apple in semiconductor and networking industries
- Presented an audit firmwide to attorneys and admin enhancing claim drafting practices and organization
- Created a statistical predictor model to forecast future firm revenues using data from the USPTO and a random assignment method with Python, Pandas, JSON, SQL, and NumPy

Rovisys, Aurora, Ohio

Systems Engineer Co-op

- Created and engineered electrical control systems that integrated with process lines, manufacturing equipment, and sensors, enabling efficient operation and coordination
- Utilized digital logic principles to program in ladder logic and cad block diagrams for process control

ENGINEERING EXTRACURICULARS

Auto Drive Challenge

Sensors Team Member

- Worked on a team to develop a level 4 autonomous vehicle that can navigate SAE Standard driving courses
- Use tools from Linux and Python to calibrate Lidar sensors and create the data set for the HDMAP

FPGA Inclinometer

- Created a 2-axis inclinometer with ADXL345 accelerometer, seven segment displays, and MAX 10 FPGA
- Implemented 4-wire SPI SerDes interface for data communication between FPGA and ADXL345
- Completed verification utilizing logic analyzer for in-system debug and waveform analysis for signal integrity

December 2025 GPA 3.918

May 2023 – August 2023

August 2024 - Present

August 2023 - January 2024

May 2024 - August 2024