

TONY WU

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SKILLS

Languages — Java · Python · C · C++ · HTML5 · CSS3 · JavaScript
Tools — Arduino · SVN · Git · MATLAB · Eclipse · Visual Studio · Photoshop
Equipment — Oscilloscope · Network Analyzer · Function Generator

WORK EXPERIENCE

Aeryon Labs May 2016 - Aug 2016
Application Developer Waterloo, ON

- Developed features for Mission Control Software, the application used to control Aeryon's SkyRanger sUAS, using Java and the Swing framework
- Consolidated the existing navigation UI into a single, user-friendly component
- Developed a feature to allow a pilot to quickly assess various sensor values from the SkyRanger
- Implemented the UI and UX to support features from a next-generation IR camera payload
- Built a tool to automatically detect and clear sensitive location data from flight log files

Hydro One Sep 2015 - Dec 2015
Asset and Project Management Intern Brampton, ON

- Designed and implemented an algorithm with Python to trace conductor paths in the city grid
- Created scripts to generate a detailed database of the city's underground conductors which improved the company's understanding of reactive capital expenditures from 2007 - 2015

SkyWave Jan 2015 - Apr 2015
Hardware Test Automation Intern Ottawa, ON

- Developed a GUI to automate power consumption tests using IronPython and WPF
- Created a Python framework for communicating with SCPI-enabled test equipment
- Analyzed the power consumption of satellite terminals during different stages of operation

General Electric May 2014 - Aug 2014
Hardware Design Validation Intern Markham, ON

- Tested EEPROM chips to determine suitability as replacements for obsolete components
- Wrote Perl scripts to standardize test output files for easier analysis

PROJECTS

Arduino Music Player

- Built an LED circuit which mimics a scale on a piano
- LEDs light up corresponding to the notes played through a piezoelectric speaker

BJT Op-Amp

- Designed and built a multistage amplifier using BJTs
- Simulated design using Multisim and improved upon it through testing with an oscilloscope

EDUCATION

University of Waterloo Sep 2013 - Apr 2018 (Expected)
BASc in Electrical Engineering, Honours (Co-op) Waterloo, ON