

- SKILLS**
- Advanced embedded control system design acquired from project and hands-on laboratory experiences
 - Exceptional critical thinking and problem-solving skills allowing for complex engineering analysis
 - Highly motivated and organized self-starter with a strong attention to detail and work ethic
 - Outstanding oral and written communication to share creative ideas fluently in both English and French
 - Able to thrive and lead in a team or work independently in a dynamic deadline driven environment
 - Proficient in iWork, SOLIDWORKS, MATLAB/Simulink, VBA/VB, Python, C++, C, LabVIEW, L^AT_EX, Bash
 - Experience with PLC/SCADA/HMI systems, embedded microcontroller programming (Arduino, x86 Assembler)

EDUCATION **University of Waterloo** **Waterloo, ON, CA**
Candidate for B.ASc. Honours Mechanical Engineering: *3.3/4.0*
GPA *Sept. 2013 - Present*

EXPERIENCE **Apple Inc.** **Cupertino, CA, USA**
Controls Engineering: Special Projects Group (SPG)
Aug. 2017 - Present

Altaeros Energies **Boston, MA, USA**
Systems Engineering
Jan. - Apr. 2018

- Performed FEA in ANSYS and PYTHON on prototype of worlds first commercial autonomous aerostat
- Coordinated with vendors and ControlEng SERVOSoft to size all control system components (servos, drives)
- Utilized electronic lab equipment, sensors and LabVIEW HMI to gather test data and analyze with MATLAB

Ontario Die International Inc. **Kitchener, ON, CA**
Research & Development
May - Aug. 2017

- Designed robotic components (electrical, pneumatic, hydraulic) of PLC/CNC bending systems in SOLIDWORKS
- Automated tedious SOLIDWORKS tasks with the API SDK in VBA and C++ in MS Visual Studio IDEs
- Performed hands-on Q&A HMI testing, machined components, fabricated assemblies with power/hand tools

Pratt & Whitney Canada **Mississauga, ON, CA**
Operations Program Management Analyst
Sept. - Dec. 2016

- Assured on time OEM delivery of a quality turbofan engine while meeting their expectations and needs
- Developed Excel VBA programs allowing for improvements in methods of business metric preparation

Skyjack Inc. **Guelph, ON, CA**
Manufacturing Engineering
Jan. - Apr. 2016

- Worked with a team of engineers to troubleshoot production issues at an aerial work platform manufacturer

PROJECTS **Ball and Beam System Laboratory, ECE 481: Digital** **Aug 2015**
Control Systems
• Designed LabVIEW HMI, performed system ID, implemented/tuned digital controller on NI cRIO FPGA

Drumming Rhythm Arduino Hack, Personal: Wentworth **Mar. 2015**
Institute of Technology Hackathon
• Utilized the IDE and serial COM with MATLAB to develop real-time monitoring of drumming pattern

Model-Based Design of Wind Turbine Pitch Actuation, **Dec. 2014**
ME 360: Control Systems
• Studied time/frequency domain responses to assure closed loop stability of PI Simulink model in MATLAB

INTERESTS

- Further developing skills while gaining new exposure to software, real-time controls and electronics
- Repairing off road vehicles, DIY Arduino projects, socializing with friends and playing intramural sports