

# SEBASTIEN BLANCHET

Cupertino, CA, USA

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- 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, LaTeX, Bash
  - Experience with PLC/SCADA/HMI systems, embedded microcontroller programming (Arduino, x86 Assembler)
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<b>EDUCATION</b>	<b>University of Waterloo</b> Candidate for B.ASc. Honours Mechanical Engineering: 3.3/4.0 GPA	<b>Waterloo, ON, CAN</b> Sept. 2013 - Present
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<b>EXPERIENCE</b>	<b>Apple Inc.</b> <i>Controls Engineering: Special Projects Group (SPG)</i> <ul style="list-style-type: none"><li>• PosX</li></ul> <b>Altaeros Energies</b> <i>Systems Engineering</i> <ul style="list-style-type: none"><li>• Performed FEA in ANSYS and PYTHON on prototype of worlds first commercial autonomous aerostat</li><li>• Coordinated with vendors and ControlEng SERVOfsoft to size all control system components (servos, drives)</li><li>• Utilized electronic lab equipment, sensors and LabVIEW HMI to gather test data and analyze with MATLAB</li></ul> <b>Ontario Die International Inc.</b> <i>Research &amp; Development</i> <ul style="list-style-type: none"><li>• Designed robotic components (electrical, pneumatic, hydraulic) of PLC/CNC bending systems in SOLIDWORKS</li><li>• Automated tedious SOLIDWORKS tasks with the API SDK in VBA and C++ in MS Visual Studio IDEs</li><li>• Performed hands-on Q&amp;A HMI testing, machined components, fabricated assemblies with power/hand tools</li></ul> <b>Pratt &amp; Whitney Canada</b> <i>Operations Program Management Analyst</i> <ul style="list-style-type: none"><li>• Assured on time OEM delivery of a quality turbofan engine while meeting their expectations and needs</li><li>• Developed Excel VBA programs allowing for improvements in methods of business metric preparation</li></ul> <b>Skyjack Inc.</b> <i>Manufacturing Engineering</i> <ul style="list-style-type: none"><li>• Worked with a team of engineers to troubleshoot production issues at an aerial work platform manufacturer</li></ul>	<b>Cupertino, CA, USA</b> Aug. 2017 - Present  <b>Boston, MA, USA</b> Jan. - Apr. 2017  <b>Kitchener, ON, CAN</b> May - Aug. 2016  <b>Mississauga, ON, CAN</b> Sept. - Dec. 2015  <b>Guelph, ON, CAN</b> Jan. - Apr. 2015
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<b>PROJECTS</b>	<b>Ball &amp; Beam Lab</b> ECE481: Digital Control Systems • Designed LabVIEW HMI, performed system ID, implemented/tuned digital controller on NI cRIO FPGA	Aug 2017
	<b>Drum Rhythm Arduino Hack</b> Personal: WIT Hackathon • Utilized the IDE and serial COM with MATLAB to develop real-time monitoring of drumming pattern	Mar. 2017
	<b>Wind Turbine Pitch Actuation</b> ME360: Control Systems • Studied time/frequency domain responses to assure closed loop stability of PI Simulink model in MATLAB	Dec. 2016
	<b>Mining Safety Device</b> ME380: Engineering Design • Developed a 3D printed enclosure to protect internal Arduino and sensors of severe underground environment, design and test	Nov. 2016

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<b>INTERESTS</b>	<ul style="list-style-type: none"><li>• Further developing skills while gaining new exposure to software, real-time controls and electronics</li><li>• Repairing off road vehicles, DIY Arduino projects, socializing with friends and playing intramural sports</li></ul>
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