

JOHN LIAN

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SKILLS

- **UAV robotics development:** ROS, mavros, Dronekit, MAVLink, ArduPilot, PX4, and Git.
- **Scientific computing:** MATLAB, Python, and LabVIEW.
- **CAD:** SolidWorks, AutoCAD, and Inventor.
- **Languages:** Python, C++, MATLAB, Java, Bash, Excel VBA, LaTeX, HTML, CSS, and Mandarin Chinese.

EXPERIENCE

ROBOTICS ENGINEER

JULY 2015 - PRESENT

Pleiades Robotics

Montreal, QC

- Integrate ROS with MAVLink-driven quadcopter.
- Develop autonomous flight programs with Dronekit.
- Spearhead *Scrum* project management initiative.

UNDERGRADUATE RESEARCHER

JAN. 2014 - DEC. 2014

Prof. Andrew Higgins, McGill University

Montreal, QC

- Led a small team to build an air-bearing device for levitating ring magnets.
- Developed an open-source MATLAB particle tracking application.
- Created a graphical MATLAB numerical simulator for nonlinear interactions.

SYSTEMS INTEGRATION INTERN

SEPT. 2013 - DEC. 2013

Bombardier Aerospace

Montreal, QC

- Coordinated review of over 100 aerospace component qualification packages from suppliers.
- Developed a standard review procedure resulting in accelerated qualification phase.
- Created and implemented Excel VBA macros to increase team efficiency.

MAINTENANCE ENGINEER INTERN

OCT. 2012 - DEC 2012

Suncor Energy

Fort McMurray, AB

- Analyzed and categorized over 500 failure cases, and recorded them into SAP.
- Investigated 10 high-profile failures and authored their failure reports.
- Spearheaded a workshop safety initiative.

LEADERSHIP

FOUNDER AND PROGRAM COORDINATOR

SEPT. 2013 - APR. 2015

FRC Team 4955, Robotique FIRST Québec & Fusion Jeunesse

Montreal, QC

- Led 30 students and 10 mentors across mechanical, software, electrical, and business divisions.
- Coordinated development of two 120-lb remote controlled robots - each within six weeks.
- Implemented team sustainability strategies and won the FRC Rookie Grant (\$7,000 over three years).

EDUCATION

MCGILL UNIVERSITY

SEPT. 2010 - MAY 2015

Bachelor's Degree, Honours Mechanical Engineering - Internship Program

Montreal, QC

- J. W. McConnell Scholarship, Richard Lawrence Weldon Scholarship, & Faculty of Engineering Scholarship.
- GPA: 3.59/4.00.