

JOHN LIAN

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SKILLS

- **Full stack UAV robotics development** with ROS, mavros, Dronekit, MAVLink, ArduPilot, PX4, and Git.
- **Scientific computing** using MATLAB, Python, and occasionally LabVIEW.
- **CAD** using 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, SWPG McGill

Montreal, QC

- Lead 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

FALL 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 5 Excel VBA macros to reduce team workload.

MAINTENANCE ENGINEER INTERN

FALL 2012

Suncor Energy

Fort McMurray, AB

- Analyzed and categorized over 500 failure cases 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

- Lead 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

2010 - 2015

Bachelor of Honours Mechanical Engineering

Montreal, QC

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