JOHN LIAN

johnlian.ca (514) 885-0198 john.lian@mail.mcgill.ca

SKILLS

- **Full-stack UAV robotics development** with ROS, mavros, Dronekit, MAVLink, ardupilot, and PX4
- **Scientific computing** using MATLAB, Python, and occasionally LabVIEW
- **CAD** using SolidWorks, AutoCAD, and Inventor
- **Languages:** Python, C++, MATLAB, Java, Excel VBA, LaTeX, HTML, CSS, and Mandarin Chinese

EXPERIENCE

ROBOTICS ENGINEER — JULY 2015 - PRESENT

Pleiades Robotics — *Montreal, QC*

- Integration of ROS with MAVLink-driven quadcopter
- Development of autonomous flight programs with Dronekit
- Spearheaded *Scrum* project management initiative

UNDERGRADUATE RESEARCHER — JAN. 2014 - DEC. 2014

Prof. Andrew Higgins, SWPG McGill — *Montreal, QC*

- Designed and built an air-bearing apparatus for levitating ring magnets
- Developed a open source MATLAB particle tracking application
- Created a graphical MATLAB numerical simulator for nonlinear interactions

SYSTEMS INTEGRATION INTERN — FALL 2013

Bombardier Aerospace — *Montreal, QC*

- Conducted review of over 100 aerospace component qualification packages
- 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, winning 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