JOHN LIAN

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EDUCATION

BACHELOR OF ENGINEERING - HONOURS MECHANICAL ENGINEERING MONTREAL, QC

McGill University **Class of 2015**

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

LEADERSHIP

FOUNDER & PROGRAM COORDINATOR MONTREAL, QC

FRC Team 4955, Robotique FIRST Québec & Fusion Jeunesse **Sept 2013 - Apr 2015**

- Led a team of 40 individuals into their first entrance into FRC, winning the $7,000 FRC Rookie Grant.
- Managed development, priorities, and budget of two robots through to completion - each within six weeks.
- Implemented sustainability strategies and recruited mentors, achieving 100% return rate in Year Two.

EXPERIENCE

ROBOTICS ENGINEER MONTREAL, QC

Pleiades Robotics **July 2015 - Mar 2016**

- Spearheaded the adoption of agile methodologies, implementing *scrum* and bi-weekly sprints for six engineers.
- Integrated ROS with MAVLink-driven quadcopter and machine vision applications.
- Designed and developed autonomous flight programs, resulting in two successful demos for potential partners.

UNDERGRADUATE RESEARCHER MONTREAL, QC

Prof. Andrew Higgins, McGill University **Jan - Dec 2014**

- Led a small team to design and build a magnet-levitation device in two months, a month ahead of schedule.
- Developed particle tracking and simulator programs, then open-sourced both.
- Successfully completed project goals of as the lead research student, exceeding undergrad research expectations.

SYSTEMS INTEGRATION INTERN MONTREAL, QC

Bombardier Aerospace **Sept - Dec 2013**

- Coordinated review of over 100 component qualification packages across three suppliers and ten integrators.
- Created and implemented Excel VBA macros for routine data extraction, increasing team efficiency.
- Developed a review procedure resulting in 30% time saving for typical reviews, winning an XCell award.

MAINTENANCE ENGINEER INTERN FORT McMURRAY, AB

Suncor Energy **Oct - Dec 2012**

- Categorized over 500 haul truck failures using SAP, enabling a more data-driven approach to failure analysis.
- Investigated 10 high-profile failures and authored their failure reports along with two engineers.
- Led development of a workshop safety initiative which ensured workers' safety when lifting CAT 140M snow plows.

SKILLS

- **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, Excel VBA, Java, Bash, LaTeX, HTML, CSS, and Mandarin Chinese.