# Daniel Agar

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Professional Experience Vayu, Inc

Ypsilanti, Michigan

Software Lead

August 2016 - Present

- Lead software development of a long range autonomous vertical take-off and landing (VTOL) vehicle for the purpose of medical aid delivery in developing countries.
- Control system development and tuning
- Cross platform (Windows, Linux, MacOS, iOS, Android) ground control software

### Prioria Robotics, Inc

Gainesville, Florida

Software Engineer

December 2014 - August 2016

- Involved in all aspects of UAV software development including the autopilot, ground control station, and payloads
- Made significant open source contributions to PX4 and QGroundControl

IBM Ottawa, Ontario

Software Developer

January 2012 – August 2014

- Development work on IBM's J9 Java Virtual Machine.
- Initial member of the OMR Project https://github.com/eclipse/omr
- Extracted core memory management technology from IBM's Java Virtual Machine and used to improve performance of the Python and Ruby
- Worked with C, C++, Java, Python, and assembly (x86, ppc, s390) across Linux, Windows, AIX and z/OS.

IBM Ottawa, Ontario

Extreme Blue Technical Intern

May 2011 - August 2011

- Part of a small self directed team of interns tasked with proving the viability of a new IBM JVM technology (packed objects).
- Incorporated experimental JVM packed objects into various IBM products to improve performance and reduce memory footprint.
- Successfully demonstrated the financial feasability of the project to executive leadership and obtained further investment in the project.
- Worked with Java, C++, Python and encountered a wide range of IBM products and technologies.

### Oceanic Consulting Corporation

St. John's, Newfoundland

Software Developer

July 2009 – September 2010

- Heavily modified existing numerical software, in some cases reducing execution time by an order of magnitude.
- Adapted research code for commercial use.
- Created custom 3D visualization and mesh editing tools with OpenGL and Qt.
- Worked extensively with Python, Fortran, C++, Qt, OpenGL, Java.

EDUCATION

#### University of Waterloo

Waterloo, Ontario

BSc, Honours Computational Physics

Computer Science Minor

2009

• Studied a wide range of topics in applied and theoretical physics, mathematics, and computer science

## Skills Languages

• Proficient in C, C++, Python, Java, Fortran, Bash

## Operating Systems

• Very experienced with GNU/Linux, Android and Windows

### ${\bf Software}$

 $\bullet$  Eclipse, Visual Studio, Git, Subversion, GDB, Matlab, MySQL