ROWAN FERRABEE

2A Mechatronics Engineering Student

Summary:
- Over 5 years of experience programming in a wide variety of disciplines from embedded to web development.
- Quick and eager to learn and apply new skills; enjoys a challenge
- Resourceful, autodidactic, self-motivated, friendly, and helpful.

Employment Experience:

Junior Embedded Software Developer - BlackBerry Ltd.   Fall 2015 - Winter 2016

Contributed code to the operating system of BlackBerry's first Android-based mobile device, the BlackBerry Priv, from January 2015 until final product release. Making major software design changes to the sensors subsystem, tracking down and fixing bugs within the bringup department.

Firmware Development Student - BlackBerry Ltd.   Winter 2015 - Spring 2015

Worked specifically in the Linux kernel in the areas of bringup, sensors, and display. Spent time implementing new features, fixing known bugs, creating Android applications used for software development and testing, and documenting the design of various existing software systems.

Extra-Curricular Involvement

Co-Founder and Co-President, UW BioMechatronics Club   Summer 2015 - Present

Just over a year old, the University of Waterloo Biomechatronics Club now contains well over 100 members and supports 6 design projects in fields such as prosthetics and human exoskeletons. Provide both technical and leadership support to all project leads and executive members while managing the club's everyday needs and playing a large role in the design and implementation of Beowulf (a grip-assistive hand exoskeleton), the club's first design project.

Active Involvement in Small Group Side-Projects

Recent projects include:

a genetic algorithm and neural network library to introduce software developers to the field of machine learning;

SMS-DJ, a web application which allows partygoers to text song requests to their party's playlist without having to download any apps;

and a mechanical calligrapher which would take in your handwriting from a mobile app and then physically write out any text files that you send it onto paper.

Education and Extra-curricular Involvement:

Candidate for B.A.S., Mechatronics Engineering, University of Waterloo   Fall 2014 - Present

Currently being trained in mechanical design, CAD, circuits, material science, statics, embedded systems, and computer programming with an average of 96% last term. Heavy emphasis on project-based work in small groups.

OCDSB Graduate, Nepean High School   Fall 2010 - Spring 2014

Silver Medalist, achieving a grade 12 top six average of 95%. Co-founded the Competition Mathematics Club, represented the class of 2014 on the Student's Council, and headed the Reach for the Top team.

Part-Time Student, Carleton University   Fall 2012 - Spring 2013
Attended evening classes at Carleton University throughout grade 11, completing first year Linear Algebra with a final grade
of 99% and second year Multivariable Calculus with a final grade of 100%.

Programming Experience:
C++
Studied C++ for 3 years at Nepean High School and used those skills to place 11th in Ontario in the 2014
Educational Computing Organization of Ontario (ECOO) team coding competition. Went on to use those skills in a
professional setting at BlackBerry Ltd. and in countless personal projects.

Embedded Systems
Self taught in the Arduino Programming Language and have used Arduino to code embedded systems such as
Ultrasonic Room Mapping devices, Automatic Window Blinds, Force Sensing Gloves and more.

Web Development
Currently running websites through Nginx and Node.js on Ubuntu servers using various tools such as Twilio and
Postgres.

Volunteerism:
Community Volunteer   Fall 2010 - Summer 2014
Earned a total of 229 community volunteer hours throughout high school through various volunteer pursuits such as
sorting food at the Ottawa Food Bank; organizing and hosting events for younger students at Nepean High School;
assisting camp counselors at St. Brigid's Summer Camp.

Awards:
Carmen E. Pollock Math Award, Nepean High School
Awarded to a graduate who has shown distinction in Mathematics beyond the high school curriculum.

Various Awards, Center for Education in Mathematics and Computing, University of Waterloo
School champion in the 2011 Pascal, 2012 Cayley, 2014 Open, and 2014 Senior Mathematics Contests.

Interests:
Leadership and Community
Engaged in community leadership throughout high school and into university by taking a leading role in activities
such as Student's Council, LINK Crew, OCDSB Leadership Camp, and peer tutoring.

Acting, Musical Stage Production   Fall 2013 - Spring 2014
Performed the role of Enjolras in Nepean High School's production of Les Miserables.

Drum and Dance Performance, Baobob Youth Performers   Spring 2012 - Spring
2014
Ghanaian musical and cultural exchange. Included 3 week study and performing tour in Ghana, West Africa.

Intramural Sports
Play on Ultimate Frisbee, Bubble Soccer, and Volleyball teams with friends in the UW intramural league

Contact:
Email: rowan.ferrabee@gmail.com   LinkedIn: Rowan Ferrabee