

Software Development Experience

Data Analysis Algorithms

June 2016 – February 2017

- Developed scientific Python programs using the NumPy and Matplotlib packages
- Software was used in materials science research for data extraction, data filtration and optimization, and evaluation
- Experiment results returned from the software received Bronze Medal honors at the Canada Wide Science Fair and recognition from the Consulting Engineers of Ontario, Western University, and the University of British Columbia

IOS & Android Game

June 2016 – Current

- Developed a three dimensional platformer game using the Unity3D game engine
- Implemented concepts such as procedural generation, object oriented programming, and Perlin Noise
- Made use of various smartphone technologies including accelerometer, gyroscope, and multi-touch
- Game will be optimized and released for both IOS and Android platforms

High School Computer Science Courses

September 2014 – June 2017

- Developed modular programs in Java and Python through the courses ICS3U and ICS4U
- Developed mathematical graphing software suitable for use in high school math classes as well as software enhancements for Texas Instruments graphing calculators
- Competed in the 2017 Canadian Computing Competition, scoring the highest in the District School Board of Niagara

Work Experience

Physics Research Assistant

June 2016 – June 2017

Brock University – 1812 Sir Isaac Brock Way, St. Catharines, Ontario

- Conducted experiments in the Brock University Physics Department under the approval of Dr. Thad Harroun
- Studied the wave nature of mechanical energy transformations in various macroscopic, granular materials
- Developed various software and hardware solutions for maintaining the testing environment and collecting data
- Presented the conclusions and applications of the research at the Brock University Symposium, the Niagara Regional Science and Engineering Fair, and the Canada Wide Science Fair

Guest Flow Associate

March 2015 – October 2015

Digital Attractions Inc. – 4530 Drummond Road, Niagara Falls, Ontario

- Worked at the Horn-blower Niagara Cruises tourism site
- Took on a variety of roles including crowd management, product sales, and photography/Photoshop editing

Education

University of Waterloo

September, 2017 – April 2022 (Expected Graduation)

200 University Avenue West, Waterloo, Ontario

- Bachelor of Software Engineering

Brock University

February 2017 – April 2017

1812 Sir Isaac Brock Way, St. Catharines, Ontario

- Enrolled in and completed the course, MATH 1P97 (Calculus with Applications), during senior year of high school

Sir Winston Churchill Secondary School

September 2013 – June 2017

101 Glen Morris Drive, St. Catharines, Ontario

- **Academic Honors** – Governor General's Academic Medal, DSBN Scholar, Honour Roll, Staff Award, Euclid Mathematics Contest School Champion, Avogadro Chemistry Contest School Champion
- **Leadership Activities** – Student Council Treasurer (elected by student body), DSBN Student Senate
- **Athletics** – Rowing (Canadian Secondary School Rowing Championships Silver Medalist), Junior Varsity Basketball
- **Volunteer** – Peer Tutor for SAT testing (40 hours/school year), Camp Counselor at YMCA of Niagara (130 hours total)