

α **William Ambrozic**

wambrozi@uoguelph.ca

+1(647)-226-5411

<http://williamambrozic.info/>

Technical Skills

LANGUAGES

- Python, C, Java, C++, C#

COMPUTATIONAL MATHEMATICS

- Numerical Methods, Implementation

OBJECT-ORIENTED PROGRAMMING

- Scalability, Maintainability

OPERATING SYSTEMS

- Debian Linux, Windows, Mac OSX

DEVELOPMENT TOOLS

- Vim, Atom, Android Studio, Unity

DESIGN TOOLS

- Adobe Photoshop, Illustrator, Premiere, After Effects, Maya, Blender, GIMP

Experience

PERSONAL PROJECTS

williamambrozic.info – Personal Website

July – August, 2019

- Utilizing bootstrap to make a responsive website on both mobile and desktop
- Successfully hosts personal projects seen below and many more from the age of 12
- Links all social and work related links (StackOverflow, YouTube, LinkedIn, GitHub, etc.)

Google Billboard Problem Solver

November, 2018

- Solved the Google Billboard Problem using the brothers formulae, and Euler's limit for e
- Written in a raw Python script

NEAT Nueral Network Implementation for *Space Shooter* by Tasdik Rahman

Oct, 2018

- Programmed in Python using Pygame and Object-Oriented-Programming (OOP)
- Implemented mathematical models for the NEAT algorithm
- Tinkered with a preexisting OOP program to meet NEAT needs

Modular Arithmetic Visualizer

July – August, 2018

- Made in Python using Tkinter with Turtle Graphics
- Successfully visualizes Modular Arithmetic at different factors and differing degrees of nodes

Sham - Social Media Android App

March – May, 2018

- Programmed in Java using Android Studio
- Developed a strong structure for scalability and written using OOP
- Graphics made in Adobe Photoshop, and illustrator
- Published

Ouroboros – Android Game

March – May, 2017

- Written at 16 using Java and Android Studio
- Fully designed in Adobe Photoshop, and Illustrator
- Music made using Fl Studio
- published

WORK EXPERIENCE

Personal Assistant, Markham BIA, Markham, ON

2015 – 2017

- Aided the synergy of the environment through monetary distribution
- Helped set up community events for a sustainable experience

EDUCATION

Bachelor of Computing, Computer Science (Co-op)

2018-present

University of Guelph, Guelph, ON

- Completing a minor in Mathematics
- Awarded the entrance scholarship for students who achieve a 90+ average out of high school

Sample Courses Taken:

- CIS*2910 - Discrete Structures in Comp II
- CIS*2520 - Data Structures
- CIS*2430 - Object Oriented Programming
- MATH*2200 - Advanced Calculus I
- STAT*2040 – Statistics I
- MATH*1160 - Linear Algebra I

Key academic projects:

- *Contact List on Disk (2019)*: Worked independently to create a dynamic contact list written on disk using binary files in C. The user could edit, remove, or add to the list of contacts saving all required information directly to the disk.
- *Motorola 68K clock (2019)*: Independently worked to produce a working clock written in assembly for the Motorola 68K microprocessor. The clock could be set, reset and in general held all requirements of a standard alarm clock.
- *IMDb data retriever (2019)*: A program written independently that stores the IMDb database into multiple trees. The trees could then retrieve a title, actor, etc in less than a second.

Extra-Curricular Experience

Euclid Math Competition

2018

- The Euclid Mathematics Contest is an opportunity for students to have fun and to develop their mathematical problem solving ability” (The University of Waterloo).
- Achieved an above average score of 60