ADRIAN PASQUALINI

COMPUTER SCIENCE STUDENT UNIVERSITY OF WATERLOO

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WORK EXPERIENCE

Machine Learning Software Developer

BLACKBERRY, SEPTEMBER 2019 - DECEMBER 2019

• Researched and prototyped modern machine learning techniques for Malware Detection on mobile devices.
• Optimized our product's Android Package scanning procedure using multi-threaded C++ to increase malware detection speed by 80%.
• Developed a Node/Express JS testing server to handle external requests and reduce future burden on our team.
• Organized co-op student events as a member of the BlackBerry Student Social Committee.

LEADERSHIP AND VOLUNTEERING

Mastermind Xavier Club Co-Founder

SEPTEMBER 2016 - JUNE 2018

• Organized fun and unique puzzles and challenges for members to solve at weekly meetings.
• Trained members for the MENSA entrance exam.
• Supervised a group of 10 - 20 high school students.

Habitat for Humanity Volunteer

JULY 2017 - JANUARY 2018

• Arranged the ReStore warehouse to cleanly fit and display all merchandise to improve efficiency.
• Assisted customers load and unload their items and helped them locate products within the store.

TECHNICAL SKILLS

• C++	• Processing 3	• Git
• C	• HTML	• Docker
• Python	• CSS	• Bash
• Java	• MySQL	• Linux/Unix
• Swift	• Node.js	• Octave
• Javascript	• Express.js	• Agile/Jira

PROJECTS

Facial Recognition Program

SEPTEMBER 2018 - JANUARY 2019

• Developed a facial recognition program in GNU Octave that can distinguish between the face it was trained on and any other face.
• Implemented a gradient descent algorithm with regularization and achieved a 90% accuracy rate within test and cross- validation sets.

Pocket Parliament Web Application

JANUARY 2020 - PRESENT, POCKETPARLIAMENT.CA

• Designed and built a web application using React, CSS and Material UI.
• Utilized existing APIs to fetch and display Parliament information such as recent events, bills, cabinet members and members of parliament.

Box2D Physics Simulations

OCTOBER 2017 - MARCH 2018

• Utilized Processing 3 and the Box2D physics engine to model real life phenomena with digital simulations.
• Created relevant models to supplement physics lab reports when there were no adequate models online.

Aquatic Attack 2-Player Game

APRIL 2016 - JUNE 2016

• Developed a two-player duelling game using Python and Pygame sprites with object-oriented programming.
• Coordinated the game's design and balanced game mechanics through rigorous playtesting.

EDUCATION

University of Waterloo

BACHELOR OF COMPUTER SCIENCE - AI OPTION

• GPA: 3.97 Cumulative Average: 91.3%
• Accepted into Artificial Intelligence Option
• Dean's Honours List for 1A, 1B, and 2A terms.