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| **Technical Skills**   * Demonstrable experience with Python   + Libraries: Pandas, Hypothesis, Pygame, Pillow, Plotly, Pytest and Python-ta   + Coursework in Introduction to Computer Science, Foundations of Computer Science I, Foundations of Computer Science II * Data analysis and experience with various data structures in Python * Ability to analyze programming efficiency using running-time analysis * Strong understanding of mathematical definitions, predicates and proofs * Highly proficient in formal logical thinking and problem solving in mathematics and computer science * Excellent written and verbal communication skills * Experience with leading a team, collaborative partnerships and working independently |

**Projects**

* Developed and implemented multiple efficient AI algorithms using trees and recursion to simulate and visually represent checkers games, while also creating a user-friendly interface in Pygame
* Constructed two AI to play games of Adversarial Wordle “Absurdle” against one another
* Designed block-based RSA cryptosystem & explored RSA digital signature scheme
* Conducted data analysis on hypertension and low-income rates in Toronto with Plotly & Pandas
* Designed algorithms to traverse graphs and interconnection networks for several topologies
* Exploration of blockchain, ledgers, and cryptocurrency with linked lists
* Exploration of fractals, chaos theory and point sequences using Python and illustrations in Pygame
* Reverse engineered Wordle in Python to solve puzzles and displayed results in Pygame
* Developed two video games using Pygame

**Education**

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| **University of Toronto 2022-Present** |

* Candidate for Bachelor of Science, Computer Science Specialist

**White Oaks Secondary School 2018–2022**

* Accelerated Learning Program (ALP) & International Baccalaureate Program (IB)

**Extra-Curricular and Volunteering Experience**

**Oak Hacks Member & Python Contest Competitor**  **2020**

* Worked collaboratively to design a video game in Python

**DECA Competitor and Executive**  **2018-2022**

* Provincial Finalist Award
* Creative Writtens Trainer

**Math Contests 2018-2022**

* Canadian Senior Math Contest, Euclid, White Oaks Team

**Debate Team 2019-2020**

* Upper Canada College Tournament Semi-Finalist Award