

EDUCATION

Carnegie Mellon University | Bachelor of Science in Computer Science (AI), Pittsburgh PA

May 2024

GPA: 4.00/4.00

Selected Coursework: Introduction to Machine Learning, Parallel and Sequential Data Structures and Algorithms, Introduction to Computer Systems, Probability Theory for Computer Scientists, Functional Programming, Principles of Imperative Computation, Matrices and Linear Transformations, Calculus in N Dimensions

AWARDS

- 2021 European Girls' Olympiad in Informatics Bronze Medal
- USA Computing Olympiad Gold Division
- European Girls' Math Olympiad Team Selection Invitee
- 2020 & 2021 AIME Qualifier

EXPERIENCES

Research Assistant | CMU Robotics Institute Pittsburgh, PA

May 2022 — Present

- Optimized weak supervision data labeling via parallelization with **python multiprocessing**
- Improved timeseries search algorithm in AUVIEWER from logarithmic to constant time
- Designed front-end and back-end structure and API for label model evaluation with **Python, JS, and Vue**, enabling clinicians to provide feedback on weak supervision

15-150 Functional Programming Teaching Assistant | CMU School of Computer Science Pittsburgh, PA

May 2022 — Present

- Led weekly recitations of 15 students focusing on **functional programming** and mathematical reasoning
- Hosted weekly office hours to guide students through difficult concepts and answer their questions
- Developed course content by improving algorithms related questions in homework using **Github** pull requests and issues

Undergraduate Researcher | CMU School of Computer Science Pittsburgh, PA

Jan 2022 — May 2022

- Solving problems related to Ramsey Theory using **SAT solvers** and **C++** under the supervision of professor John Mackey
- Implemented theories of graph symmetry breaking into CNF with C++ that speeds up SAT solvers
- Wrote **bash** scripts that automated the CNF generating, solving, and verifying process

Web Developer | BizZone Inc Toronto, ON

Jan 2021 — Aug 2021

- Developed business intelligence data visualization tools with **typescript** and **Echarts.js** and used by 1000 customers
- Experimented with a **Unity** application for meetings in virtual reality to explore better options of virtual meeting
- Collaborated with a team of 7 developers to integrate the visualization tool into web services

Volunteer Researcher | University of Toronto Dynamic Graphics Project

Apr 2019 — Aug 2021

- Developed a VR utility for geometry processing library Libigl using **OpenVR** and **OpenGL** collaborating with Professor Jacobson and PhD mentor Sarah

PROJECTS

SnapSync

TartanHacks 2022

- Created a web based application with **Django** which shares uploaded photos with everyone that appears in them through face recognition
- Modified and integrated **AI face recognition** algorithms using python

SKILLS

Programming C, C++, Java, Python, Standard ML, OpenGL, OpenVR, Javascript, HTML, CSS
Tools Git, Vim, LaTeX