Aaliyah Pirani

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Skills and Achievements

- 3+ years of experience overseeing and expanding student participation in initiatives through social media advertisements designed using Canva and PowerPoint
- Built partnerships and collaborations for club and nonprofit events, ensuring impactful programming and greater accessibility for students in STEM and math initiatives
- Computer skills: Python (including libraries numpy, scikit-learn, scipy.stats), Microsoft Office, Power Automate

Education and Awards

HBSc. in Computer Science, University of Toronto, cGPA: 4.0   Sept. 2024 - Apr. 2028 (expected)
Coursework: Calculus with Proofs, Linear Algebra, Foundations of Computer Science I & II, Introductory Statistics
Howard Ferguson Admission Scholarship ($12,000), recognition as an outstanding student from University College

TD Scholarship for Community Leadership ($70,000)   May 2024
1 of 20 Canadian students selected from 3100+ applicants in recognition of exemplary community leadership.

Professional Experience

Student Research Associate, University of Calgary   Jun. 2023 - Apr. 2024
- Analyzed hemodynamic forces as a biomarker for heart disease in rTOF patients using MATLAB, Excel under Dr. Julio Garcia Flores, showcasing their potential for early heart disease diagnosis; presented findings at ISMRM 2024.

STEMinmotion Founder and Co-President   Dec. 2021 - Jun. 2024
- Co-founded an international non-profit to bridge educational gaps in STEM, enabling junior high students to access advanced curricula regardless of financial barriers, inspiring future innovators
- Organized educational events and accessible tutoring sessions at science museums and online, directly impacting over 1,000 students in underrepresented communities

Warrant Officer - 604 "Moose" Royal Canadian Air Cadets   Sept. 2018 - Jun. 2024
- Led a squadron of 150+ cadets by coordinating weekly activities and promoting discipline during routine parade nights, while providing mentorship and support by fostering a caring learning environment

Projects

SUMO Robot Designer and Competitor   Oct. 2024 - Present
- Designing a competitive sumo robot using SolidWorks, circuitry programming using arduino and set for intramural competition beginning February 2025

Aqualens Water Quality Testing App Developer   Sept. 2024 - Present
- Collaborating with UofT's Centre for Global Engineering to develop a water quality analysis app, aiming to improve access to safe water for 100+ communities in areas with unreliable water quality across Mexico
- Using Flutter for the frontend and backend data processing, using Github for effective team collaboration

Analysis on the Effect of COVID-19 on Individuals' Life Satisfaction by Age   Nov. 2024 - Dec. 2024
- Conducted statistical analyses using multiple linear regression and decision tree classification revealing age-specific trends in life satisfaction impacted by COVID-19 using data from the Canadian Social Connection Survey
- Utilized Python and libraries, such as scikit-learn, numpy, scipy, matplotlib, statsmodels to create effective visual aids

Other Experience and Interests

Private Pilot (recreational)   July 2024 - Present
- Awarded the Power Pilot Training Scholarship by the Air Cadet League of Canada
- Accumulated 50+ hours in the Cessna 172S, earning the Private Pilot License