

Varunan Varathan

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EDUCATION AND ACHIEVEMENTS

McMaster University | Bachelor of Computer Engineering Candidate

Expected April 2024/2025

- Working towards a major in Engineering with a minor in Business
- Graduated from Sir Wilfrid Laurier Collegiate Institute as an Honour Roll International Baccalaureate Student
- Learning/Specializing in Linear Algebra, Algorithms, Calculus, Circuits, Engineering Mechanics, Programming
- Recognized at Rising Scholars of Canada – Received award for Academic Achievement at annual ceremony
- Honorary Mentions at Mock UN Debate | Science Fair Award Winner | Character Education Creativity/Confidence Leader

WORK EXPERIENCE

Software Developer | H.H. Angus & Associates Ltd.

May 2022 – August 2022

- Worked with colleagues in the digital services team in a dynamic environment to create technical solutions to healthcare and engineering applications

Key Accomplishments:

- Created various programs and applications in Python for Autodesk CAD Environments and data ingest systems
- Worked with various AWS Environments to create data analysis tools and explored upgrading onsite infrastructure to cloud-based solutions

Researcher Analyst and Advocate | Noolaham Foundation

July 2020 – March 2021

- Researched the impacts of the Sri Lankan Civil War on Literacy rates with experts, colleagues, and peers
- Worked with Python, Jupyter Notebook and Google Collab to analyze research points and use web scraping tools

Key Accomplishments:

- Presented the data to charity members to demonstrate the importance of the charity's ongoing efforts and studying the landscape of the local area in terms of demographics, income and education using thousands of data points
- Used visualization tools and Python Libraries such as PowerBI, Pandas, GeoPandas and NumPY for presentation

EXTRA-CURRICULAR, PROJECTS AND AREAS OF INTEREST

Projects and Interests:

- **Peregrine Bot (Python, AWS):** Discord Bot that verifies links for malware – designed a user interface in React and AWS
- **Python Interpreter (Python, JS):** Website that runs Python in a web interface using PyPy.js as a base
- **AternosBot (Python):** Created my own “APP” for a discord bot that can turn on and off a hosted sever using credentials
- **Python Frameworks:** Learning about Matplotlib, Tensor, Pandas, GeoPandas, Selenium, NumPY

MacChangers – Economics and Prosperity Division

- Took leadership in developing solutions to economic and financial challenges in the Greater Hamilton Region
- Interviewed local business owners regarding challenges they faced during the pandemic and how city policies could better reflect their interests to create a more well-rounded solution to the issue at hand

DeGroote Finance and Investment Council – Mentorship

- Working with experts in business, analytics and finance to develop skills in investing, marketing, and business management
- Applying relevant skills towards building skills in Sales and Trading

SKILLS

Programming and Computing:

Java | JavaScript (HTML/CSS and Node): TypeScript | Python + Pip/Libraries | GoLang | Microsoft Office |Photoshop

- Working on creating full stack applications, web scraping, “Code Challenges” (such as AdventofCode) and Hackathon ideas

Leadership, Collaboration and Teamwork

- Played an important role in the Toastmaster's initiative at HH Angus to promote teamwork, collaboration and confidence

Engineering, Designing, and Prototyping

Figma | Google Suite | Autodesk Inventor | Jupyter Notebook | Visual Studio Code | GitHub/Git

- University of Toronto – Da Vinci Engineering Enrichment Program: Recognized for creating a prototype solution for individuals facing mental health challenges using the Engineering Process, UI/UX design elements and software like Figma