Bhumika Arora

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EDUCATION

B.Sc., Computer Science   2020-2024

McGill University, Canada   **GPA: 4.0**

- **Relevant Coursework:** Linear Algebra, Foundations of Programming.
- **Technical Skills**: Python, Java
- **Current Coursework**: Introduction to Software Systems, Mathematical Tools, Data Structures, Recursive and Non-recursive Algorithms, Abstract Data Types, Inheritance.

CSSI Coursera   2020

Google

- Completed the **Java** Programming: Arrays, Lists, and Structured Data course on Coursera sponsored by Google Tech Student Development.

PROJECTS

Human Postural Sway and Balance Control

2019

- Measured body sway acceleration of different age groups during eyes closed and eyes opened using inertial sensors of a smartphone.
- Filtered 45000 values for each individual through MS Excel to calculate root mean square.
- Presented the postural sway using scatter plots in MS Excel.
- Developed a report using MS word by clubbing together the graphs and the knowledge I gathered from the project.
- Migrated the program from MS Excel to **Python** using my programming skills.
- Identified 2 individuals who may be at risk of falls as indicated by their exceptionally high postural sway.

Nutrition Tracker   2020

- Developed a nutrition tracking program using **Python.**
- Calculated the BMI of the users and provided them feedback on their body composition i.e. underweight or overweight.
- Provided the user with food options and constructed a daily meal plan according to their choice and returned calories.
- Returned the prescribed duration for their preferred exercise to meet their calorie goals.
- Tracked the sleep cycle of the users by taking inputs and suggested tips on how to improve their sleep cycle.

Encryption Program   2020

- Developed an encryption and decryption program (Caesar cipher) using object oriented programming using **Java.**
- Successfully employed the program to send secret messages to group members during an online mystery room game that I hosted.

CareBot   2021

- Implemented API to generate random quotes after a specific command from the user.
- Allowed the user to set various types of reminders and a timer.
- Created a shop for the users to buy plants and upgrade them.
- Created a journal that allows the user to write diary entries into and read them later.

WORK EXPERIENCE

Voice of Streets (NGO)/ Volunteer   2018-2020

- Helped organize 3 celebratory events for over 50 underprivileged children to support their education and learning.
- Effectively employed my communication skills to tutor over a dozen children from lower socio-economic backgrounds to help them improve their academic performance in their schools.

St. Gregorios School/ High School   2018-2020

- Eco Club Volunteer: Utilized my organisational skills to help organize rallies, plays and other social events to spread awareness among local community members about the environmental challenges such as air pollution.

ACTIVITIES

Daulat Ram College/ Inspire camp   2018

- Selected as one of the 1% students nationwide for a one week **STEM** program based on academic success.

Hack the North   2021

- Created a discord bot in 36 hours using **Python, discord.py** and **uptime robot**.