Shaziah Gafur

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KEY HIGHLIGHTS

- Facilitated TurnerHacks –the first hackathon at Turner Fenton Secondary School–and administered workshops to increase enthusiasm for technological innovation among youth
- Coordinated the first skype-call system for Education for a Nation, which connects Canadian high school students with less fortunate students in India to educate each other and provide mental support

PROJECTS

Augmented Workouts

Winning Project at JAMHacks 2017 (hackathon)

Fitness Gaming Console that makes wearisome exercise more enjoyable by immersing the user in a responsive 3D virtual environment

I developed the C++ code for generating pedometer functions and constructed a calorie counter by interpreting physical movements. I was also involved in hardware setup of Arduino and research.

Piano Chord Detection Using Fourier Analysis

November 2017 – February 2018

Self-directed research project focused on discovering a technique to identify music notes of piano chords in a sample of music

Self-taught university-level mathematics as a high school student. Built programs in Java to simplify complex calculations of the Fourier Transform and implement sorting algorithms. I also used Python for the Mingus library to assess frequency distribution and identify specific musical keys.

Process Improvement for reBOOT Canada

October 2018 – Present

Engineering design project as part of the Volunteer Experience in Engineering Program

Implementing the first database management system for reBOOT Canada by designing a relational database using object-oriented programming in Python, Django, PostgreSQL and Heroku. The project aims to employ task automation and ultimately improve hardware donation processes.

BTOC Solutions

October 2016 – March 2017

To reduce inefficient storage and cases of data loss, I proposed and initiated the first-ever database system to organize client payment information for a private company. It was created from scratch and raw data using SQL, Microsoft Access & Excel. Advanced techniques include an automatic email system, macros, report & form generation, and error handling.

EDUCATION

University of Toronto St. George
2018-2022 (expected)
Computer Engineering

SELECTED SKILLS

Languages: Java, C/C++, Python, JavaScript, HTML, CSS

Data Analytics & Database Management: Python Web Scraping PostgreSQL, MATLAB, SQL, Microsoft Access & Excel

Frameworks: Django, jQuery

Tools: Git, Photoshop, WordPress

LEADERSHIP EXPERIENCE

Lead Workshop Coordinator for Major League Hacking at TurnerHacks in June 2018

Directed volunteers to lead interactive workshops in Web Development and Android App Development for attendees of the hackathon; Major involvement in event planning and scheduling for 50+ guests

Marketing & Communications Coordinator for Youth for Humanity

Developed official website from scratch, coordinated tasks to others for content writing, improved social media presence, managed contact forms, and created infographics

Member of UofT WearTech (Wearable Technology club) Hardware and Software Design Teams

Controlling gesture input using Python programming, Arduino and various hardware.