Yousam Asham

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 GitHub

 LinkedIn

EDUCATION

MCMASTER UNIVERSITY | B.Eng.BME Software Engineering
Expected Apr 2022 | Hamilton, ON • Cum. GPA: 3.85 / 4.0
Course highlights: Software Development (A+), Discrete Mathematics and Applications (A+), Data Structures and Algorithms (A+), Software Design (A), Principles of Programming (A-).

EXPERIENCE

LLETTONNA | Design Developer
April 2020 – Present | Hamilton, ON

- Working with software design tools to develop working models of llettonna products.
- Identify solutions to improve production efficiency.
- Coordinate with other engineers, management, and the creative department.

PROJECTS

FILTRACK | Java
Filtrack is a Web App used to help users look for music recommendations from a large dataset of 300,000+ tracks. However, it is not your ordinary music recommendations application; it uses scores assigned to each track and match it with the user's input of what kind of music the user would like to hear. During the completion of this project, I learned a lot about the design and implementation of various graphing, sorting, and searching algorithms.

REACBALANCE | Python
ReacBalance is an object oriented python program that balances given chemical equations that can be constructed using other modules that are part of the program. Learned lots of knowledge about software development structure as well as the importance of object oriented programming, modularization, and information hiding.

IMAGE CONVOLUTION | C
A C program that changes an inputted image into another image, given a convolution kernel matrix. Gained knowledge about image processing in software programming.

CITY SKYLINE | Assembly (NASM)
An assembly program that allows the user to build their custom city skyline and modify it on the command line. Deepened my understanding of the inner works of a programming language as well as the 64 bit system.

TELEARM | Python
A telescoping arm wheelchair attachment for a quadriplegic patient. TeleArm detects the height of the button to be pressed and applies pressure to it, allowing buttons to be accessible to our patient. Learned how to integrate hardware with software projects.

TECHNICAL SKILLS

LANGUAGES
C • Python • Java • • HTML • CSS • Shell • Matlab • Assembly

TOOLS & FRAMEWORKS
LaTeX • Git • Doxygen • PyTest • JUnit • NumPy • ValGrind • VSCode