


GUY D'MELLO

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EXPERIENCE

Business Analyst

May. 2021 - Aug. 2021

RBC

Toronto, Ontario

- Helped close friends and beginners interested in coding learn the basics of python such as theory, syntax, conditional statements, control loops, file io and provided lessons to students remotely.
- Supported development and implementation of approaches using python and VBA to address automation needs in personal and commercial banking.
- Implemented tools to help automate long processes and increase efficiency.

Peer Tutor

Jun. 2018 - Present

Python/Java Tutor

Toronto, Ontario

- Helped close friends and beginners interested in coding learn the basics of python such as theory, syntax, conditional statements, control loops, file io and provided lessons remotely

EDUCATION

University of Toronto | MAJ Computer Science | MAJ GIS | MIN Math

Sep. 2019 - Present

Honors Bachelor of Science in Computer Science and Mathematics - GPA: 3.19/4.0

Relevant courses: Software Design, Data Structures & Analysis, Software Tools & Systems Programming, Computer Organization, Introduction to Databases

PROJECTS

Huffman_Tree_Compression.py | *Python, Pygame, PyCharm*

- Operated with tree data structures in a real-world context.
- Implemented recursive operations on trees.
- Applied an algorithm to generate a Huffman tree in python, taking design decisions with efficiency in mind.
- Implement building blocks for the algorithm to compress data with a Huffman encoding.
- Assessed possible improvements to a sub-optimal tree and the changes needed to generate an improved tree.

Three_Musketeers.java | *Java, JavaFX, Agile, Design Patterns, File IO, Eclipse*

- Created a strategy based multiplayer board game in **Java** called Three Musketeers invented by Haar Hoolim
- Developed several modes such as Human vs Human, Human vs Random Agent, and Human vs Greedy Agent
- Used **JavaFX** to create a **GUI** to enhance gameplay features
- Utilized **Agile Methodologies**, **Git**, **GitHub**, and **Scrum Meetings** to work efficiently in a team of 4 developers

Discord Weather Bot (UofT PyJaC 2022) | *JavaScript, Discord.js, Node.js, Visual Studio Code*

- **Full Stack Development** experience of a convenient weather bot, *RainMan*, intended for any Discord user
- Applied **Agile Methodologies (Scrum)**, **Git**, **GitHub** in a team of 3 developers in a 1-week deadline
- Used a **Weather API** and database allowing users to view the weather of any city across the world
- Provides several weather commands and advanced weather statistics, in an easy and **marketable** fashion

Tree Map Visualizer (Python Recursive Data Structures) | *Python, Pygame, File IO, PyCharm*

- Implementations of **Recursive Methods** to visualize byte size of a file
- Used **UI Design** of a file size in directions represented by its byte size

Web Mapping (Website Mapping Development) | *ArcGIS, ArcMap, Carto, ERSI, Excel*

- Mapped COVID-19 in Peel Region using **databases** to represent a mapping tool
- Advanced statistics development when viewing Peel Region statistics when viewing red zones

TECHNICAL SKILLS

Languages: Python, Java, C, SQL, VBA, HTML/CSS, JavaScript/TypeScript, RStudio, Shell, Assembly

Developer Tools: Git/GitHub, Figma, ArcMap, ArcGIS, JavaFX, LaTeX

Miscellaneous/Frameworks: JavaFX, Carto, Sony Vegas, Adobe Premier, MS Office, Agile Methodologies, Linux