MOHAMMAD BILAL

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EDUCATION

McMaster University | Engineering I with Co-op *Sept. 2022 - Present*

- GPA: 12.0/12.0

SKILLS

Programming Languages: Java, Python, JavaScript, HTML/CSS
Tools & Platforms: Photoshop, Office 365, Google Workspace
Hardware: Arduino and 3D Printing

EXPERIENCE

St. Marcellinus STEM Club | President and Co-Founder *Sept. 2021 – June 2022*

- Taught lessons and delivered presentations on various STEM topics, such as programming and circuits.
- Worked with a team to market the club and successfully recruited over 100 members.
- Organized and hosted a mini hackathon event, providing a hands-on opportunity for students to work on STEM projects and collaborate with peers.

St. Marcellinus Peer Tutoring | Tutor *Sept. 2020 – June 2022*

- Provided one-on-one tutoring to students in a variety of subjects, including Python, Java, mathematics, chemistry, and physics.
- Assessed students' strengths and weaknesses to identify areas for improvement and develop customized learning plans.
- Used teaching methods and materials to effectively communicate concepts and improve understanding.

PROJECTS

CRASHED! | JavaScript

- Designed and developed an educational car dodging game using object-oriented programming principles, including multilevel inheritance, polymorphism, and object overloading.
- Implemented game mechanics and interactive elements, such as obstacle avoidance and game customizations.
- Created engaging and intuitive user interface using graphics and animations.

Program to Facilitate Sterilization | Python

- Led a team of 3 to develop a Python-based program to control a robotic arm for the sterilization of surgical tools.
- Implemented remote sensing and actuation techniques to control the movement and function of the robotic arm.
- Conducted testing and debugging to ensure the accurate and efficient operation of the robotic arm.

Frogger | Java

- Designed and developed a Frogger-style game using Java Swing and object-oriented programming principles, including inheritance, polymorphism, and looping.
- Created interactive game elements, such as player character movement and reoccurring car movement.
- Designed an engaging graphical user interface using Java Swing.

Blackjack | Java

- Designed and developed a graphical blackjack application using Java Swing and object-oriented programming principles, including inheritance and polymorphism.
- Implemented game mechanics, such as card dealing, player decisions, and win/loss conditions.
- Created intuitive user interface using Java Swing graphics.

AWARDS

Governor General's Academic Medal | Student with the highest average upon graduating from a secondary school.

Principal's Award | Awarded to the graduating student with the highest average in their top 6 grade 12 courses.

McMaster Award of Excellence | Awarded to students entering their program in the top 10% of their faculty.

Euclid School Champion | Scored the highest mark on the University of Waterloo's Euclid math contest at my secondary school.