Muhammad Abdullah Motasim

Key Competencies

MS Office

• Communication

Detail OrientedResearch Skills

Independent WorkOrganization

• Teamwork

• Client Relations

Education

University of Toronto

Sep. 2022 - May 2027

Bachelor of Engineering in Computer/Electrical Engineering

Toronto, ON

Minor in Artificial Intelligence, Engineering Business, and Statistics

Work Experience

University of Toronto

May 2023 - August 2023

Faculty of Medicine - Student Interviewer

Toronto, ON

- Collaborated with the Human Biology faculty to enhance and enrich the student learning experience.
- Performed 12 interviews with graduate students to gather feedback on departmental experiences, evaluating these interviews to identify opportunities for improvement, and presenting these findings to professors in a professional setting.
- Developed strong skills in oral/written **communication**, qualitative analysis, and public speaking.

Chestnut Residence Faculty

January 2023 - April 2023

Engineering Team Leader

Toronto, ON

- Collaborated with a team of 5 engineering students to redesign a social study space within a student residence.
- Worked as team leader to ensure client needs and deadlines were satisfied. Designed a robust solution that utilized 20% of previously unclaimed space while cutting the original budget by \$24 000.
- Developed skills in team management techniques, client relations, and leadership.

McMaster University

November 2020 - February 2021

Research Assistant

Hamilton, ON

- Worked within the McMaster University medical department to collect, analyze, and present data on the autonomic nervous system.
- Duties included collecting and analyzing data from daily tests and performing weekly check-ins with the professor to update on progress.
- Utilized software such as MATLAB and Word to perform data analysis and present findings in a mock research paper.
- Developed skills in data analysis/collection, MATLAB, and technical writing.

Projects

BOLT - Geographic Information System $\mid C/C++, GTK, Glade$

January 2024 - April 2024

- Collaborating with a team of two engineering students, we developed a graphical system akin to Google Maps for showcasing the locations of electric vehicle chargers.
- The project was crafted using C/C++ and the OpenStreetMap API, with Git handling version control. We also implemented algorithms like Dijkstra and A* to streamline path finding, along with data structures such as Tries and sorted maps to efficiently manage our data.
- Developed skills in writing industry-grade, maintainable code, utilizing Git, and implementing advanced algorithms and data structures.

Image Colourizer | Python, Pytorch, Tensor Flow, NumPy, Pandas

May 2023 - August 2023

- Collaborated within a team of 4 for a project in my Applied Fundamentals of Deep Learning course, creating an AI model to add color to grayscale images, aiding in the restoration of historical images.
- Leveraged a Generative Adversarial Network (GAN) architecture, achieving a network accuracy of 94% and a discriminator accuracy of 86%.
- Developed skills in machine learning/AI development, utilizing PyTorch/TensorFlow, and NumPy/Pandas.

$Hackathons \mid C/C++, Python, Arduino, Circuit Design$

 ${\bf September~2022-Present}$

- Participated in several hackathons including the Miro-Bot Coding Contest, UofT Capture the Flag, MakeUofT, and UTRA hacks.
- Acquired teamwork skills by collaboratively setting and achieving goals within strict time constraints, while fostering healthy competition among peers.
- Developed skills in problem-solving, thinking analytically, cryptography, wiring, and software/hardware development.