# Maher Muhtadi

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## EDUCATION

## Bachelor of Science, Computer Science

Undergraduate

Toronto Metropolitan University (formerly Ryerson), Canada

September 2020 - December 2023

• Scored a cumulative GPA of 3.96 out of 4.33

• Earned a place on the Faculty of Science Dean's List in 2021, 2022 and 2023

## General Certificate of Education, A-Level

High School

Bangladesh International School, Saudi Arabia

June~2020

## International General Certificate of Secondary Education, O-Level

High School

Bangladesh International School, Saudi Arabia

June 2018

## CERTIFICATIONS

# Security Guard Licence

Private Security and Investigative Services, Ontario

March 2022 - October 2023

# Emergency First Aid, CPR, and AED Level C Certification

The Academy for First Aid and Safety Training

October 2021 - October 2024

#### SKILLS

- Proficient in several programming languages such as Python, Java, C, JavaScript, TypeScript, Perl, PHP, ASP, Ruby, ECLiPSE Prolog, Elixir, Haskell, Bash, Pharo Smalltalk, Visual Basic and Common Lisp
- Knowledgeable in fields such as AI, Machine Learning, Full-Stack Web Development and Data Management
- Experienced in web frameworks such as React, Svelte, AngularJS, Vue, Django, JQuery, Chakra UI and Bootstrap
- Skilled in Data Science libraries such as TensorFlow, Scikit-Learn, NLTK, Pandas, NumPy and Matplotlib
- Adept at other languages such as SQL, HTML, CSS, SVG, XML, JSON and Markdown
- Familiar with common tools such as Vim, Git, GitHub, Visual Studio, Docker, MongoDB, MySQL and VMs

# Relevant Experiences

More on LinkedIn

# WebMoti Developer

Part-Time

Inclusive Media Design Centre, Toronto Metropolitan University, Canada

September 2023 - Present

- Building and upgrading hardware components of WebMoti system's Raspberry Pi robot enabling physical presence of neuro-diverse students joining in-person classes remotely
- Developing a React JS video conferencing web app using Twilio API to facilitate hybrid classrooms
- Configuring firewalls, permissions and ports of the robot to securely connect to the web app using Remote.It
- Integrating the robot's remote control interface into the web app allowing physical classroom interactions such as hand raising via the robot
- Conducting formative and summative usability tests on the web app to expose bugs and ensure intuitive design and
  accessible user experience for both students and instructor

Python Instructor Part-Time

Kodland, UK

October 2021 - October 2022

- Instructed over 150 students of varying skill levels in Python programming language with a 100% passing rate
- Delivered lessons in digestible format based on the skill level of the students
- Evaluated student projects through code reviewing and debugging in a timely and effective manner
- Analyzed students' data structures and algorithms to provide detailed feedback for optimizing code performance
- Performed troubleshooting for virtual meetings and the Kodland IDE to ensure the smooth delivery of lessons
- Engaged parents in discussions regarding performance feedback on their children and their concerns

Other Experiences More on LinkedIn

Senior Specialist

Part-Time

Student Learning Center, Toronto Metropolitan University, Canada

August 2023 - Present

- Received Employee of the Month in September 2023 for embodying curiosity and dedication, enriching team dynamics and demonstrating crisis management in the workplace
- Pitched a financially feasible solution that won the Student Life and Learning Support Divine Design Thinking hackathon addressing the lack of campus resource awareness among students
- Managed the production of a mini-series, played at the Staff Winter Gathering, by scripting, casting, directing, filming and editing
- Organizing events for the Staff Winter Gathering as an active member of the Holiday Committee
- Leading informative tours of the Student Learning Center to stakeholders and prospective or incoming students
- Training new recruits by imparting knowledge and expertise to ensure proper conduct of responsibilities

Specialist Part-Time

Student Learning Center, Toronto Metropolitan University, Canada

January 2023 - August 2023

- Ensuring customer satisfaction by asking guided questions to identify the needs of patrons and addressing them
- Assisting with preparation, setup and tear down of events including the tracking of equipment lent out
- Roaming the building to establish staff presence and ensure all building etiquette and regulations are respected
- Monitoring and reporting security or maintenance issues on work site and minimizing any risk to the community
- · Collecting and maintaining statistical data relevant in making critical operational decisions

# Concierge and Security Guard

Part-Time

The Forest Hill Group, Canada

September 2022 - February 2023

- Conducted thorough patrols of the premises to maintain the safety and security of the residents
- Enforced access control throughout the site by securing all access points and granting entry to authorised people
- Responded promptly to emergency situations and adhered to established protocols to ensure the safety of residents
- Summarised daily activities during shifts and wrote detailed special occurrence reports following security incidents
- Reviewed pass-on logs and important announcements to carefully plan and prioritize tasks
- Logged all incoming parcels and released to recipients after verifying their identities

Projects More on Github

#### Chat App

React, TypeScript, JavaScript, HTML, CSS

- Enabled real-time, bidirectional and low-latency messaging between multiple users using Socket.IO
- Improved app performance by routing reusable React JS components into a Single Page Application
- Developed a robust and scalable back-end server architecture using Node.js and Express
- Designed responsive and mobile-friendly components using flexboxes and media queries
- Utilized Cloudflare's CDN, caching, DDoS protection and SSL/TLS certificates for high performance and security
- Deployed app with CapRover and hosted publicly on an Ubuntu system using Oracle Cloud Server

## Natural Language Query Processor

ECLiPSE Prolog

- Parsed noun phrase queries, about a hypothetical chain of electronics stores, through a linguistic NLU system
- Built the database using atomic propositions in a Prolog knowledge base
- Leveraged Prolog back-chaining for results retrieval from knowledge base using grammar and lexicon rules

## Online Shopping and Delivery Web Application

PHP, JavaScript, SQL, CSS

- Designed database in a Boyce-Codd Normal Form relation schema and implemented using MySQLi
- Created dynamic webpages through back-end PHP scripts, JQuery and JavaScript HTML DOM manipulation
- Integrated asynchronous connection to Google Maps Platform APIs for generating and displaying delivery routes
- Enforced app security by validating form submissions, using domain restricted API keys, storing salt encoded MD5 hashing or aes-256-cbc encryption of sensitive information, requiring user authentication and authorization etc

## Routing Algorithms Visualizer

JavaScript, HTML, CSS

- Implemented network building and rendering on browser with a custom graph class and Cytoscape.js library
- Applied Dijkstra's and Bellman-Ford Algorithms to calculate shortest paths for routing between network devices
- Enhanced GUI performance with asynchronous event callbacks using JavaScript Event-Driven programming