

Maher Muhtadi

Websites: [linkedin.com/in/maher-m](https://www.linkedin.com/in/maher-m) | github.com/MaherMuhtadi | maher-m.com

SKILLS

Programming Languages: Python, Java, C, Javascript, Perl, PHP, ASP, Ruby, ECLiPSE Prolog, Elixir, Haskell, Bash, Pharo Smalltalk, Common Lisp
Other Languages: SQL, HTML, CSS, SVG, XML, JSON, Markdown
Web Frameworks: AngularJS, React, Vue, Django, JQuery, Bootstrap
Tools: Windows, Linux, Vim, SSH, Git, GitHub, Fossil, Visual Studio Code, ECLiPSE, Docker, MySQL, Oracle SQL Developer, XAMPP, VirtualBox/VMWare, Slack/Slack-Apps
Interests: Full-Stack Web Development, Artificial Intelligence, Game Development

EDUCATION

Bachelor of Science, Computer Science 4th Year, Undergraduate
Toronto Metropolitan University (formerly Ryerson), Canada September 2020 – Present
• Scored a cumulative GPA of 3.95 out of 4.33
• Earned a place on the Faculty of Science Dean's List every year since 2021

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

PROJECTS

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 through validating form submissions, using domain restricted API keys, storing salt encoded MD5 hashing or aes-256-cbc encryption of sensitive information, restricting privileges to admin accounts

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

Personal Portfolio Website *HTML, CSS, JavaScript*
• Implemented interactive elements and colour theme toggling using CSS and JavaScript HTML DOM manipulation
• Designed responsive and mobile-friendly webpages using flexboxes, media queries and Bootstrap
• Utilized Cloudflare's CDN, caching, DDoS protection and SSL/TLS certificates for high performance and security
• Deployed website with CapRover and hosted publicly on an Ubuntu system using Oracle Cloud Server

Snake Game *Python*
• Abstracted the PyGame library using custom [framework](#) for handling game entities and events
• Developed game logic to be scalable following modern software engineering standards

EXPERIENCE

Python Instructor Part-Time
Kodland, UK December 2021 – October 2022
• Instructed over 150 students of varying skill levels in Python programming language with a 100% passing rate
• Evaluated student projects through code reviewing and debugging in a timely and effective manner
• Analyzed students' algorithms and provided structured feedback for optimizing code performance
• Performed troubleshooting for virtual meetings and the Kodland IDE to ensure the smooth delivery of lessons