## **Mohamed Moustafa**

Toronto, Canada • (647) 239 - 5266

mh.moustafa98@gmail.com • [linkedin.com/in/mohammadhmoustafa](http://linkedin.com/in/mohammadhmoustafa) • [mohammadmoustafa.tech](http://mohammadmoustafa.tech)

## **Education**

Bachelor of Science in Computer Science, 2020

University of Toronto

* Software Engineering Specialist with courses focusing on **operating systems**, **compiler optimization**, **computer graphics**, **software engineering**, and **algorithms & data structures**
* Undergraduate Student Research Award recipient (value of over **$4,500** CAD)
* **10x Teaching Assistant** in courses on **operating systems**, **software design**, and introductory computer science

Skills

* C/C++
* Java
* Python
* JavaScript
* Haskell
* Android
* Bash
* React
* NodeJS
* SQL
* MongoDB

## **Experience**

**University of Toronto**, Toronto, Canada

*Teaching Assistant* Sep 2017 — Present

* Utilized techniques in education to design and deliver engaging lessons in the form of weekly tutorials, teaching over 200 students across 10 teaching assignments to date
* Encouraged student improvement through useful feedback provided while marking course evaluations such as assignments, midterms, and exams

**Ontario Ministry of Education**, Toronto, Canada

*Full Stack Developer* Sep 2017 — Dec. 2017

* Engineered an in-house search engine solution for effective querying of ministry documents, which was previously done manually over the course of several weeks, using **Spring Boot**, expediting the knowledge collection phase
* Utilized OracleXE and Java to create modular object models, making it easier to prototype new front-end designs
* Incorporated the Watson NLU API alongside statistical methods to create a standardized ranking system for document searches
* Extensively used Bootstrap and JavaScript libraries (including jQuery) to construct a front-end that was easily usable by employees of different backgrounds and levels of technical knowledge

## **Publications**

Brian Harrington, Jingyiran Li, **Mohamed Moustafa**, Marzieh Ahmadzadeh, and Nick Cheng. 2019. **On the Effect of Question Ordering on Performance and Confidence in Computer Science Examinations**. In Proceedings of the 50th ACM Technical Symposium on Computer Science Education (SIGCSE ’19). Association for Computing Machinery, New York, NY, USA, 620–626. DOI:<https://doi.org/10.1145/3287324.3287398>

**Projects**

**TrendMap NodeJS, React, Reddit API, LeafletJS, Material UI, Docker, Redis**

An interactive map that allows users to browse top news stories and Reddit posts by region. Data is retrieved from **Reddit** and **NewsAPI** and is cached and updated as frequently as every hour in order to provide a fast browsing experience. I personally worked on the frontend using **React** and **Material UI**, as well as retrieving data from the Reddit API in the backend.