# Mohamed Harmanani

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# **EDUCATION**

## UNIVERSITY OF TORONTO

COMPUTER SCIENCE SPECIALIST Expected May 2020 | Toronto, ON Cum. GPA: 3.11/4.00 Minor in Philosophy

# COURSEWORK

## **UNDERGADUATE**

Object-Oriented Programming Software Design Systems Programming Data Structures Operating Systems Relational Databases

# **SKILLS**

#### **PROGRAMMING**

Python • Java • C • HTML CSS • Bash • LATEX • Racket Haskell • MySQL

#### **FRAMEWORKS**

NumPy • Matplotlib • pandas BeautifulSoup • Java Swing • AWT Graphics2D

#### **TOOLS & TECHNOLOGIES**

Eclipse • Git • Unix/Linux • gdb Windows • Visual Studio Code • valgrind

## **EXPERIENCE**

#### **OGERO TELECOMMUNICATIONS**

SOFTWARE DEVELOPMENT INTERN April 2018 - May 2018 | Beirut, LB

- Implemented tools to analyze data pertaining to enterprise and employee daily performance with the help of pandas & NumPy
- Implemented algorithms to fetch, pull, and visualize data for the company's ticketing system
- Greatly cut down time spent gathering data and writing reports

# SIDE PROJECTS

## **EPISODE RECOMMENDATION SYSTEM**

COMMAND LINE APPLICATION Python, SQL

- Implemented a recommendation system that matches keyword input from the user with the data
- Wrote Python scripts to scrape and store TV show data from IMDb into a SQLite database
- Implemented the TF-IDF, cosine similiarity, and Jaccard procedures to perform basic content-based filtering and natural language computing

#### **UNBEATABLE TIC-TAC-TOE**

**MVC APPLICATION** 

Java

- Used the minimax algorithm to implement an unbeatable artificial agent for Tic-Tac-Toe
- Designed a clean, minimalist user interface with the help of Java Swing and AWT

# COURSE PROJECTS

## **PAINT CLONE**

MVC APPLICATION

Java

- Implemented a MS Paint clone program using Java Swing, AWT, and Graphics2D.
- Added save and load functionalities.
- Used Scrum to work on the first part of the project as part of a team of four, then in pairs.
- Helmed the first part as Scrum master, and oversaw adequate division of roles and user stories.

# **EXTRACURRICULAR ACTIVITIES**

## **GORDON INVESTMENT RESEARCH**

FINANCE SEMINAR

Oct 2018 | University of Toronto

 Attended the GIR seminars, and covered topics such as accounting, asset management, and financial modelling

#### **DEERHUNT II**

PROGRAMMING COMPETITION Feb 2018 | University of Toronto

• Applied various skills in computer science, mathematics, and statistics to progress through complex and challenging problems