Harshil Modi

harshilmodi08@gmail.com| 647-274-5055 | Eligible for J-1 Visa

LINKS

Website://harshilmodi.com
Github://harshilmodi10
Linkedin://modiharshil

EDUCATION

MCMASTER UNIVERSITY
B.ENG IN SOFTWARE ENGINEERING & BIOMEDICAL ENGINEERING
Expected April 2022 | Hamilton, ON
GPA: 3.95

Awards

Computer Science Excellence in Problem Solving Award
Motorola Software Engineering Scholarship
Aspiring Engineer Scholarship
McMaster University President's Award
Pollock Family Academic Scholarship
McMaster Dean's List

COURSEWORK

Data Structures & Algorithms (A+)
Discrete Mathematics (A+)
Principles of programing Java (A+)
Principles of programming C (A)
(Current Courses)
Computer Architecture
Distributed Systems
Linear Optimization

Activities

Artificial Intelligence Society
Competitive Programming Club
Hack the North (Hackathon)

SKILLS

LANGUAGES
Proficient: Python, Java
Intermediate: C++, C, JavaScript

TECHNICAL SKILLS
- Git
- Database Management
- Web/mobile development
- Distributed systems

EXPERIENCE

FORTRAN TRAFFIC SYSTEMS | FULL STACK DEVELOPER INTERN
Apr 2019 – Aug 2019 | Toronto, ON

- Optimized, refactored, and converted 100+ **XML files** to protocol buffer files leading to a 60% reduction in transfer time.
- Implemented a web application using **Python-Flask** and **MongoDB** for real-time simulation of 50+ traffic intersections.
- Designed a proof of concept mobile application using **Dart** and Google Firebase. Exceeded expectations by finishing project in ½ the given time.

Languages/Tools: Python, C++, JavaScript, MongoDB, Dart

CHAT AUTOMATE | SOFTWARE DEVELOPER
Nov 2017 – Apr 2019 | Toronto, ON

- Designed and productionized companies first voice recognition chatbot resulting in $25,000 a year in revenue.
- Built company website which directly increased client base by 60% and sponsorship by 20%.
- Developed databases, stored procedures, reports and data entries to **MS SQL Server**.

Languages/Tools: Python, SQL, TensorFlow

SUNNYBROOK HOSPITAL | SOFTWARE ENGINEERING INTERN
May 2018 – Aug 2018 | Toronto, ON

- Individually developed software for identifying cancerous cells; Received publication in **Biology Open Journal.**
- Implemented a cell identification classifier using **OpenCV** and **NLTK** with 85% accuracy. Outperformed a human with 75% accuracy.
- Built shell scripts to automate data analysis and improve processing time by 30%. Scripts still used by a team of 8 doctors and scientists.

Languages/Tools: Java, OpenCV, NLTK, Shell

SELECTED PROJECTS

TWITTER FAKE NEWS TRACKER
Feb 2019 | Toronto, ON

- Visually depicted tweet and retweet proliferation across 500,000 twitter users using graphing library iGraph.
- Implemented **Hybrid Bellman-Ford-Dijkstra's** algorithm to improve run time bound by 17%.

Languages/Tools: Java, Python, MongoDB

IMAGE RECREATION WITH GENETIC ALGORITHM
Nov 2018 | Toronto, ON

- Developed algorithm to generate identical images from random pixels using genetic algorithm, achieved 87% accuracy.
- Implemented an exponentially decaying adaptive learning rate to decrease average run time by 12%.

Languages/Tools: C, Bash, iGraph