Harshil Modi

harshilmodi08@gmail.com 647-274-5055 web/harshilmodi.com in/modiharshil github/harshilmodi10

Summary

Experience with Python, C/C++, Java, Go, JavaScript, SQL, Dart, Git, React, and Linux.
Interested in distributed systems, infrastructure engineering, data science, and back-end development.

Experience

Uber San Francisco, CA
Software Engineering Intern *May 2020 - Aug 2020*

- Worked on the Marketplace Engineering team to build out an efficient driver-rider simulation platform.
- Developed an integration testing environment to allow engineers to test and validate code changes with Simulation.

Languages/Tools: Java, Go

McMaster University Hamilton, CA
Research Assistant (Machine Learning) *Mar 2020 - Aug 2020*

- Researching novel ways to accelerate drug discovery using machine learning and natural language processing.
- Built multiple sequential models for object and orientation classification for the Princeton ModelNet Dataset.

Languages/Tools: Python, Keras, Tensorflow, NLTK

Fortran Traffic Systems Toronto, ON
Full Stack Developer Intern *Apr 2019 - Aug 2019*

- Deployed prediction and analysis algorithms under smart traffic initiative to improve traffic flow in Toronto.
- Implemented a web application using Python-Flask and MongoDB for real-time simulation of 50 intersections.

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

Chat Automate (Startup) Toronto, ON
Software Developer *Nov 2017 - Apr 2019*

- Designed and deployed company's first voice recognition chatbot resulting in $25,000 a year in revenue.
- Built company website using React which directly increased client base by 60% and sponsorship by 20%.

Languages/Tools: Python, SQL, TensorFlow, React

SunnyBrook Hospital Toronto, ON
Summer Research Student (Software Engineering) *May 2018 - Aug 2018*

- Individually developed software for identifying cancerous cells; Received publication in Biology Open Journal.
- Developed a deep learning cell classification and detection model using NLTK and OpenCV with 85% accuracy.

Languages/Tools: Groovy, Java, OpenCV, NLTK

Projects

Twitter Fake News Tracker git.io/Jvq6w

- 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%.

Image Recreation with Genetics Algorithm git.io/Jvq6r

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

Education

McMaster University Hamilton, ON
Bachelor of Engineering in Software and Biomedical; GPA: 3.96/4.0 (11.7/12) *Sep 2017 - Apr 2022*

- **Courses:** Data Structures & Algorithms, Databases, Software Project Management, Computer Architecture
- **Activities:** AI Society, Competitive Programming Club, Hack the North (University of Waterloo)