# **Asim Rahman**

## Computer Engineer Student @ University of Toronto

(647)-533-0409 | asim.rahman321@gmail.com | linkedin.com/in/asim-rahman | github.com/Asim-108

#### **EDUCATION**

# **Bachelors of Applied Science: Computer Engineering, minor in AI**

September 2021 - April 2025

University of Toronto, St. George Campus

- **Relevant courses**: Programming Fundamentals, Digital Systems, Computer Organization, Software Communication & Design, Deep Learning, Operating Systems, Algorithms and Data Structures
- Worked as 3rd year class representative advocating for students, communicating course issues to professors and ECE Office, voting as a member of Faculty Council
- Managed class representatives for all 4 years of ECE as ECE Academic Director in 2nd year

## TECHNICAL SKILLS

**Programming**: C/C++, Python, Git, ARM Assembly, Verilog, MATLAB, PyTorch

**Tools**: Visual Studio Code, Netbeans, Quartus 2, Modelsim, Google Workspace, Microsoft Office, Cisco Packet Tracer **Networking**: Switch and Router configuration, IP automation such as DHCP And NAT for LANS, VLANS

#### **CERTIFICATIONS**

CCNA: Enterprise Networking, Security, and Automation - Cisco Systems (June 2021)

CCNA: Switching, Routing, and Wireless Essentials - Cisco Systems (June 2021)

IT Essentials - Cisco Systems (June 2021)

#### PROFESSIONAL EXPERIENCE

#### Cisco Systems - Intern

Summer 2020

- Further developed computer networking skills and IP automation through numerous Cisco Networking Academy learning workshops, online courses, and practical LAN implementations
- Participated in a variety of networking and speaker session opportunities and workshops, learning from, and engaging with Cisco career professionals demonstrating interpersonal and social networking skills

#### **PROJECTS**

## **Deep Learning, Vehicle Detection Model**

August 2023

- Designed a deep learning model that classifies and creates bounding boxes around vehicles, traffic lights, etc
- Hyperparameters for the model were fine tuned through iterative grid search that minimizes training, validation, and testing loss

#### **Engineering Software Design, GIS for Students**

Winter 2023

- Worked in a group of 3 to develop a Geographic Information System (GIS) program similar to Google Maps in C++
- Utilized the OSM (OpenStreetMap) database, GTK toolkit and EZGL graphics package to draw the map, design GUI and allow interactivity of map to search, move, and zoom to any desired location defined in the map
- Learned effective design and communication skills for large-scale software development projects
- Used STL templates and data structures such as vectors and maps to enhance performance
- Implemented Dijkstra's, A\*, and 2-opt algorithms to facilitate pathfinding and obtain optimal directions in cities

## **Engineering Design, Air Quality Monitoring System**

Winter 2022

- Worked alongside a team and client to develop a cheap and affordable indoor air quality monitoring system
- Created a working prototype utilizing Raspberry Pi and air sensors that was presented to, and approved by our client

## Cisco Systems, Capstone Project

Summer 2020

• Designed a unique solution to allow students to reintegrate back to safe in-person learning utilizing Cisco technologies such as Cisco Meraki and Cisco Umbrella, our group placed first in Toronto