

# Anweshi Anavadya

☎ (+1) 416-835-1743 | ✉ anweshianavadya@gmail.com | 🏠 Anwesh1.github.io | 📺 Anwesh1 | 📱 anweshianavadya

## Summary of Qualifications

---

### Languages & Frameworks

C++, Python, Java, JavaScript, HTML, CSS, MySQL, MongoDB, BASH, GIT, VHDL, FileMaker, MATLAB, Unreal Engine

### Relevant Courses

Algorithms & Data Structures (C++), Logic & Discrete Math (C++), CS (Java), Digital Computers, Electronic Circuits, Adv Calculus for Engineers

## Education

---

### University of Waterloo

*Waterloo, Canada*

CANDIDATE FOR B.ASC IN COMPUTER ENGINEERING

*2019 - Present*

- University of Waterloo President's Scholarship recipient.

## Projects

---

### COVID My Tweets (RUHacks)

JAVASCRIPT, MONGODB, NODE.JS, LEAFLET.JS, BOOTSTRAP, HTML

- A data visualization and Natural Language Processing (NLP) web app for sentiment analysis regarding COVID, which lets the users search for cities, states, or lets them view the North American heat map for detailed analysis.
- Leveraged the JavaScript Twitter Search API to pinpoint COVID related keywords in tweets for specific locations and passed to a NLP-sentiment API to produce an average sentiment for that location.
- Integrated the MapBox API with Google cloud geocoding API to render a 'North American Heat Map'.

### MineBuskers (ETHWaterloo)

PYTHON, JAVASCRIPT, HTML, CSS

- A cryptocurrency-based web app that creates publicly accessible events across the world.
- Integrated Google Maps API into the project to reward users (using an in-app currency) based on their locations relative to events.
- Built a sleek UI that was not only aesthetically pleasing but was also scalable across any type of device. UI design and structure was admired and praised by various event organizers.

### Trading stocks transaction sorter

C++

- Transaction manager for simplified retrieval and manipulation of trading stock transactions to be used by financial firms and traders.
- Implemented a novel sorting algorithm to sort linked lists for faster and more efficient calculations and computations
- Created a custom transaction traversal to compute capital gains and losses on an annual basis to provide users with structured information.

### Stream cipher

C++

- A symmetric encryption/decryption algorithm based on a custom RC4 derivative to generate pseudorandom output streams.
- Achieved this using transmission-safe base85 encoded output for smooth binary transfer of raw data.

### Enigma machine

JAVA

- Working model of the famous Enigma encryption machine from World War II.
- Implemented a heuristics based brute-force algorithm to crack known plaintext outputs.

## Experiences

---

### Software Tester

*Toronto, Canada*

ADB SOLUTIONS

*May - August (2020)*

- Peer reviewed custom FileMaker schemas and automated testing of production code.

### Student Researcher

*Vellore, India*

CHRISTIAN MEDICAL COLLEGE & HOSPITAL

*July - August (2017 - 2019)*

- Observed and researched complex lab procedures (Blood drawing, gene matching and DNA extraction).

## Honors & Awards

---

2020	<b>Finalist</b> , Amongst top teams in RUHacks ('COVID my Tweets' project)	<i>Toronto, Canada</i>
2019	<b>Winner</b> , Won a cash prize at ETHWaterloo Hackathon ('MineBuskers' project)	<i>Waterloo, Canada</i>
2017	<b>Distinction</b> , Top 25% in Canada for Fermat Math Contest (University of Waterloo)	<i>Waterloo, Canada</i>
2016	<b>Distinction</b> , Top 25% in Canada for Beaver Computing Challenge (University of Waterloo)	<i>Waterloo, Canada</i>