Raghav Saboo

647-975-1250 | rsaboo@uwaterloo.ca | linkedin.com/in/raghs2000 | github.com/raghs2000

EDUCATION

University of Waterloo

Waterloo, ON

Candidate for Bachelor of Computer Science, Faculty Average - 92.77%

Sep 2019 - Present

- Scholarships & Awards: Computer Science International Student Upper-Year Scholarships, President's Scholarship of Distinction, Upper-Year Term Distinction, Dean's Honours List.
- Relevant Coursework: Object-Oriented Software Development, Algorithms & Data Structures, Operating Systems, Numerical Computation, Combinatorics, Computer Organization & Design, Sequential Programming.

EXPERIENCE

HomeX Sep 2021 – Present

Software Engineer

- Spearheaded project to restructure the in-house Geocoding Service to mitigate licensing costs.
- Integrated a Geocoding Model constructed using Pelias Elasticsearch Servers into the company infrastructure to reduce API calls by over 70% and improved average query response times by 60%.

University of Waterloo

May 2021 - Sep 2021

Undergraduate Research Assistant

 $Waterloo,\ ON$

Toronto, ON

- Developed a platform to support non-linear/dynamic learning plans for video learning under **Prof. Jian Zhao**.
- Built a **REST API** using **NodeJS** & **MongoDB** to manage data pipelines, leveraging reusables patterns to expedite processing times.

Ford Motor Company of Canada

Jan 2021 – April 2021

System Software Stability & Performance Engineer

Oakville, ON

- Designed system to measure the performance of the infotainment system testing frameworks.
- Reduced daily testing times by 15% by optimizing load scheduling on each node using the greedy paradigm.
- Implemented automated Python scripts to leverage test history data for generating key performance statistics.

Projects

NoteSus | CockroachDB, NodeJS, Google Cloud NLP, Deep API, Voiceflow

- Built a note-taking tool that classifies notes using various filters using Google Cloud's NLP API.
- Compatible with Google Home/Alexa through Voiceflow to recite note summaries for active recall.
- Supports note-taking through dictation and handwriting recognition from images.

Ardour | Python, OpenCV, Django, Google Cloud

- Developed a computer vision powered web application to **generate media recommendations** based on **sentiment analysis** through a custom collaborative filtering model using **KNN**.
- Placed amongst the **Top 10** at **HackTheValley4**, University of Toronto with **500**+ participants.
- Concept explored 1.5 years before **Spotify**'s patent!

Connect-Ted | NodeJS, Google Cloud, Twilio

- Built a SMS-enabled bot to seamlessly supply directions/news headlines without access to internet.
- Integrated Twilio, Google Cloud & News API to process and relay information using Express servers.
- Won the People's Choice Award at WinHacks 2020, University of Windsor with 400+ participants.
- Featured on MLH's global livestream.

TECHNICAL SKILLS

Languages: Python, Javascript, C++, C, SQL, R, HTML, CSS3.

Tools: MySQL, Git, CockroachDB, MongoDB, Google Cloud, Azure, Jira. Frameworks: Node.js, Docker, Django, Flask, AJAX, Material-UI, Bootstrap.

Libraries: Tensorflow, Keras, Scikit-learn, Pandas, Numpy, Matplotlib.