Raghav Saboo

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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 & Data Management, Operating Systems, Numerical Computation, Introduction to Combinatorics, Computer Organization & Design, Foundation of Sequential Programs.*

Technical Skills

Languages: Python, Javascript, C++, C, SQL, R, HTML, CSS3.
Tools: MySQL, Git, Jira, LaTeX.
Frameworks: Node.js, Django, AJAX Material-UI, Bootstrap
Libraries: Tensorflow, Keras, Scikit-learn, Google Cloud, Azure, Pandas, Numpy, Matplotlib, CockroachDB, MongoDB

Experience

Ford Motor Company of Canada Jan. 2021 – Present

System Software Stability & Performance Engineer *Oakville, ON*

- Developed server-side tooling using **Python, Javascript & MySQL** to capture and post-process key system performance diagnostics.
- Implemented mechanism to store and process testing data to **analyze framework efficiency** on parameters such as **node idle time**, and **daily testing load**.
- Piloted task to refactor code segment responsible for characterizing system performance to **optimize server loading time** and **minimize queries to the database**.
- Investigated system and processed crashes to correct defects and make optimizations.

Projects

NoteSus | *CockroachDB, NodeJS, Google Cloud NLP, Deep API, Voiceflow* Jan 2021

- Built a **collaborative note-taking tool** to help with the transition to remote work environment.
- Classifies notes using various filters generated through 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.

Safe Crowds | *Python, OpenCV, YoloV3 Darknet* May 2020

- Developed an application to **gauge adherence to social distancing norms** through live CCTV footage.
- Integrated object-detection algorithms from YoloV3 darknet with OpenCV to detect when people come into close vicinity of one another.

Connect-Ted | *NodeJS, Google Cloud, Twilio* March 2020

- Built a SMS based texting-bot 'Ted' that provides users with essential information such as directions and news headlines **without an active internet connection**.
- Constructed an Express server to integrate Twilio's messaging api with Google Cloud & News Api to process and relay information.
- Won the **People's Choice Award** at WinHacks 2020 with **over 400** participants.

Ardour | *Python, OpenCV, Django, Google Cloud* December 2019

- Developed a web application to **generate media recommendations** based on **live user experience**.
- Uses webcam to capture crowd emotion and queries Spotify & IMDB databases after sentiment analysis.
- Placed in the **Top 10 at HackTheValley4** among **100+ teams** and **over 500 participants**.
- Similar concept patented by Spotify 1.5 years later.