Aksh Ravishankar
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As a new grad with a strong interest in improving industry processes using technology, I would like to be considered for a Software Engineer position with your company. I am an undergraduate student at Carleton University and have recently earned a Bachelor of Engineering in Computer Systems Engineering. Given my education, previous internship experience, and passion for technology I believe I am the ideal candidate for this position.

I frequently interact with fascinating and revolutionary technology with the potential to improve operating procedures in the industry as an engineering student. Recently, I worked with a team of my peers to build a Lane Following system for an autonomous car using a computer vision approach. We built a neural network to recognize various lane boundaries and used a live video stream from the vehicle to stay within the detected boundaries while driving. The finished product was able to perform real-time analysis of live video and provide classifications locally, using local hardware without an internet connection. Industries and consumers have a lot to gain from these new technologies, and I am interested in connecting these clients to their needs.

During my tenure with Circle Neurovascular Imaging, I worked with a team of Software and Machine Learning Engineers to develop and deploy a solution for acute stroke care. Using machine learning as a post-processing tool on medical images, the team was able to accurately identify stroke-affected areas of the brain. As part of the quality assurance team, it was my responsibility to ensure that all product developments meet internal and federal standards for any region we intended to deploy in. As part of this internship, I have learned key skills that I believe make me a better developer, such as test-driven development, an eye for quality, and a focus on maintaining standards.

I also worked for Hatch Ltd. where my primary responsibility was to perform traffic analysis using simulation software. The results of this analysis assisted in the planning and construction of Edmonton's light rail transit system. This internship provided experience in the transportation industry and allowed me to work with people with varied technical backgrounds, which helped me learn to apply perspectives when considering how to solve an engineering problem: a skill I believe will be valuable in this role.

While I currently reside in Calgary, Canada, I am happy to relocate to most locations in Canada and the United States, and I am available for remote work.

I appreciate your time and consideration and look forward to hearing from you by phone at (403) 400-2652 or via email at aksh.ravishankar@gmail.com.

Thank You,
Aksh Ravishankar

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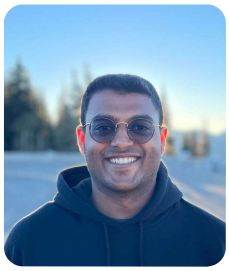
https://www.linkedin.com/in/aksh-ravishankar/	https://github.com/itsjustaksh



Education

B. Eng. | Sept 2018 – April 2023 | Carleton University

- Major: Computer Systems Engineering with a GPA of 4.0.
- Related coursework: Object-Oriented Development, Data Structures and Algorithms, Machine Learning, Cybersecurity, Communications Engineering, Project Management, Computer Architecture

Experience

Software Quality Assurance Analyst | Circle NVI | May 2021 – July 2022

- Proposed, developed, and maintained a scalable **automated testing framework** using Selenium/Python.
- Responsible for performing and documenting **software testing** steps on various platforms.
- Designed medium-fidelity **mock-ups** and architecture plan for mobile app.
- Implemented a **Continuous Deployment pipeline** to optimize development and testing workflow.
- Worked with customers to gather requirements and usage workflows.
- Used and maintained Docker environments in Linux to simulate deployment.

Infrastructure Intern | Hatch Ltd. | May 2019 – September 2019

- Worked with Light Rail Transit team to analyze traffic flow using simulation software.
- Worked with Software Development team to build in-house simulation integration tool.

Teaching Assistant | Carleton University | January 2021 – April 2023

- Responsible for helping students understand and apply concepts from **Python** and **Java** courses.
- Worked with professors and coworkers to **improve course delivery** using student feedback.

Student Outreach Representative | Carleton University | December 2019 – December 2022

- Reaching out to prospective students and answering queries about program specifics and university life.
- Documenting interactions between students and callers.

Projects

StaySafe

- Developed a person-tracker device that used **computer-vision** to track people passing through a doorway to keep count of the number present in a closed space; designed to help reduce the spread of COVID-19 in small indoor spaces.
- Built using a Raspberry Pi and an android device to share a live video feed using **IOT** methods.

Autonomous Car – Lane Following System

- Implemented an edge-detection-assisted **deep learning** hybrid model to identify lane boundaries in real-time in an autonomous car.
- Used traditional optimization techniques and pre-processing to reduce complexity and improve performance, allowing analysis of live video on-device.

Skills

- *Languages*: Python, Java, C/C++, Verilog, Linux/Unix Kernel, Windows Command Line, Bash
- *Tools*: Deep Learning (CNN), Computer Vision, TensorFlow/PyTorch, OpenCV, Git, JIRA, TeamCity, BitBucket, Docker, Maven, PyTest, OpenSSL, Embedded / SoC Dev
- *Leadership*: Skills gained as an Air Cadet Warrant Officer and as a University Teaching Assistant, mentored students to facilitate learning

Accolades

Eric Sigurdson Award – 2020-23 | Dean's Honor List recipient –2019-23 | J. Lorne Grey Scholarship – 2019

References

Nishanth Gandhi nishanth.gandhi@circlenvi.com – QA Manager at Circle NVI

Cristina Ruiz Martin cristinaruizmartin@sce.carleton.ca – Professor at Carleton University