

# Shriram Holla

+1 226-978-8906 | [sholla@uwaterloo.ca](mailto:sholla@uwaterloo.ca) | [hollaat.me](http://hollaat.me) | [linkedin.com/in/shriramholla](https://linkedin.com/in/shriramholla) | [github.com/shriramholla](https://github.com/shriramholla)

## EDUCATION

### University of Waterloo

Waterloo, ON

*Bachelor of Computer Science, GPA: 3.8*

*September. 2019 – Present*

- **Relevant Coursework:** Object Oriented Software Development, Algorithms, Data Structures and Data Management, Foundations of Sequential Programs, Probability, Computer Organization and Design
- **Scholarships and Academics:** President's Scholarship of Distinction, Upper-Year Term Distinction, Term Dean's Honours List (x3)

## SKILLS SUMMARY

**Languages:** C, C++, Python, Java, SQL, JavaScript, HTML/CSS, R, Octave

**Frameworks:** Spark, Hadoop, Spring, Cassandra, React, Node.js, Flask, Django

**Developer Tools:** Git, Docker, Kubernetes, AWS, Google Cloud Platform, Jenkins, Jira, VS Code, IntelliJ, Postman

**Libraries:** OpenCV, Tensorflow, Scikit-learn, Pandas, NumPy, Matplotlib, MapStruct

## EXPERIENCE

### Undergraduate Research Assistant

April. 2021 – Present

*University of Waterloo*

*Waterloo, ON*

- Currently working under the guidance of Professor Jian Zhao to build an AI-based email composition system.

### Software Developer

January. 2021 – April. 2021

*NCR*

*Waterloo, ON*

- Developed microservices using **Spring Boot** and **Spring Webflux** to perform millions of ATM transactions securely by integrating it with multiple backend databases and other microservices.
- Leveraged **Docker** and **Helm** to edit, deploy docker images on multiple **Kubernetes** clusters hosted on GCP.
- Enhanced **API** endpoints by refactoring and optimising code repositories, improving overall efficiency by **60%**.

### Core Software Developer

January. 2021 – April-2021

*Watonomous*

*Waterloo, ON*

- Researched and Implemented a fully autonomous **Ego-Localization** module on a self-driving car.
- Used **ROS** and **C++** to build path finding and decision-making algorithms by creating **point cloud maps**.

### Software Developer

April 2020 – December 2020

*Freelance*

*Waterloo, ON*

- Worked closely with clients to collect specifications for commercial product development
- Implemented ML algorithms like **Logistic Regression**, **K Nearest Neighbours** along with computer vision algorithms using **Scikit-learn**, **OpenCV** to automate inventory management, increasing efficiency by **300%**.
- Integrated a backend server with a web client using **React.js** to automate end-to-end workflow process.

## PROJECTS

### Connec-Ted | *Node.js, Twilio*

March 2020

- Developed a SMS-enabled chatbot that generates directions, news in the absence of an internet connection.
- Integrated **Twilio's API**, **Google Maps and News** to obtain data, which is triggered by **webhooks** received on a backend **Node.js** server.
- Winner of the **People's Choice Award** at WinHacks, University of Windsor with 400+ participants.

### Ardor | *Python, OpenCV, Django, Google Cloud Platform*

February 2020

- Created a web application using **Django** that dynamically generates media recommendations based on facial emotions captured in real time and interpreted using **sentiment analysis**.
- Leveraged **OpenCV** for image/video processing and **Google Cloud's Vision API** to obtain emotion data.
- Placed in the **Top 10** out of 500+ participants and 100+ teams at Hack The Valley, University of Toronto.

### Safe Crowds | *Tensorflow, Scikit-learn, Pandas, OpenCV, Matplotlib*

May 2020

- Built a program that checks social distancing by identifying persons using the **YOLOv3** object detection model.
- Analysed violations to form hotspots by creating "Social Fences", providing real-time graphs using **Matplotlib**.
- Utilized ML algorithms like **K-Means Clustering** using **Pandas**, **Scikit-learn** to classify danger zones.