

# Ritesh Ahlawat

Canadian Citizen (Toronto, ON) | Computer Science Student

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## Education

Ryerson University, Toronto, ON

Toronto, ON

Honors B.Sc. in Computer Science with plan to minor in Mathematics

9/2018 – 5/2022 [Expected]

## Experience

### Research Assistant - Tecla Research Project

Remote

Ryerson University IMDC

9/2020 – Present

- Working under Professor Deborah Fels developing native **Android** software for audio interface of a single-switch **voice-recognition** system integrating with Tecla Shield system 3.0 via **Bluetooth**.

### Software Developer Intern

Remote

MTO Digital Garage

8/2020 – Present

- Developing internal highway vehicle detection and tracking system in **TensorFlow**.
- Boosted **real-time performance by 775%** with custom **YOLOv4 + DeepSORT** model for detection and tracking.

### Application Analyst Intern

Toronto, ON

Ontario Digital Service

5/2020 – 8/2020

- Reduced fulfilment center delivery times **by half** by developing a front-end curbside pickup tool for Ontario services.
- Converted **90%** of an **Angular** hospital inventory system to be level A **WCAG 2.0** compliant, guaranteeing accessibility is a scalable feature.

### Research Assistant - WebMoti Research Project

Toronto, ON

Ryerson University IMDC

9/2019 – 4/2020

- Worked with minimal supervision under Professor Deborah Fels developing WebMoti – a web application that utilizes **WebRTC** allowing students with learning disabilities to attend class remotely.
- **Redesigned the entire web application** with a material design focus, significantly increased simplicity, and implemented **70% of the accessibility features** all before the given timelines.

## Skills

### Languages

Java • JavaScript • Python • C • Rust • C# • HTML5 • CSS3 • English • Hindi

### Framework / APIs

React.js • Angular • TypeScript • Express.js • TensorFlow • Firebase • GCP

### Databases

SQL • Firestore NoSQL

### Technologies

.NET • Node.js • Git/GitHub • Jupyter

### Other

Leadership • Self-Starter • Critical Thinking • Collaborative • Creative

## Leadership

### Technical Lead

Toronto, ON

Google DSC – Ryerson University

9/2020 – Present

- In charge of leading **coding workshops** that promote Google's technologies.
- Represent Ryerson University in participating in yearly **Google DSC Solution Challenge**.

## Projects

Solaro – Flask • GCP (Maps and AutoML) • GeoJSON • HTML/CSS/JS • Semantic UI

Devpost - GitHub

- Web-app which detects roof type and calculates surface area and energy savings using computer vision with visual solar radiation input depending on the region.

COVI-DL – Python • Tensorflow • GCP AutoML • Node.js • HTML/CSS/JS

Demo - Devpost- GitHub

- Full-stack app that implements a custom regression **MLP** model predicting chance of survival once contracted COVID-19 and a custom **image classification CNN** model predicting if chest X-Ray is COVID-19 positive.