## LEANDER MATHISEN

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### **EXPERIENCE**

# **Embedded Systems Developer**

# University of Toronto Robotics Association

Sept 2019 - Apr 2020

Member of the SUMO Robotics Team

- Embedded systems design of movement of the robot using Arduino language.
- Utilizing inputs such as Line Sensor, Ultrasonic Sensor to produce output in the motors.
- Basic circuitry and 3D design of parts using SolidWorks.

Research Assistant IIT-Delhi June - Aug 2018

Detection systems for altered videos and photos with python

- Evaluating methods for altering images/videos through such as taking photos of photos to alter the time of capture.
- Creating and comparing current systems for the detection of altered videos and the methods on which they operate with Python.

#### **EDUCATION**

Toronto, ON University of Toronto Sept 2019 – May 2023

• Major: Computer Engineering, B.A.Sc.

# Washington, D.C. Washington International School

Sept 2015 - June 2019

- International Baccalaureate Diploma (2019).
- Higher levels in Mathematics, Physics, and Chemistry and Standard levels in Economics, English, and Spanish.

## **SOFTWARE PROJECTS**

## **Parking Probability Calculator**

• Probability of a parking spot being available on campus based on the conditions of time of day input and car length, predicting an amount of cars parked determined through empirical data. Then with the determined value coupled with the area the produced likelihood of parking being available with Python.

#### Virtual Personal Assistant

• Voice commanded personal assistant. Capabilities of setting, deleting, and showing reminders, getting weather, time, and date and basic country information using Python.

#### **AWARDS**

• First Honors: (2016-2019) Awarded to students with a high academic standing throughout the duration of the semester. Greater than 6.0 on a scale of 7.

## **SKILLS**

Languages: (proficient): Python (familiar): Java, JavaScript, HTML/CSS