# Aman Singh

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#### **EXPERIENCE**

#### **SOFTWARE DEVELOPER** | Maple Leaf Foods

May 2019 - August 2019 | Mississauga, ON

- Improved customer satisfaction by implementing a Product Locator web application using Flask, Pandas, and SAP databases
- Built websites for Digital Team Initiatives using React and GatsbyJS
- Improved test case speeds by 6 times by automating testing for web applications using Python and Selenium
- Improved mobile application usage by 20% at production plants by researching, developing and executing plan adoption plan

## CONNECTED AUTOMATED VEHICLE TEAM MEMBER I UWAFT

October 2018 - Present | Waterloo, ON

- Researching and developing software architecture required to convert a Chevrolet Blazer into a semi-autonomous hybrid vehicle
- Created a driving scenario using MATLAB to test sensor configurations
- Designed a Jetson Shield for the NVIDIA Jetson TX2 using Eagle
- Developing a test interface with C++ for the mobileye hardware

#### **AUTOMATION AND CONTROLS INTERN** | Maple Leaf Foods June 2018 - August 2018 | Hamilton, ON

- Troubleshot PLCs, HMIs and network issues with machinery and equipment in the facility such as FANUC Robots, boilers, and conveyor systems
- Monitored packing robotic arms and troubleshot pattern and visual recognition DECA issues by using RS Logix 5000 software and HMI interfaces
- Led seminars to educate over 25 electricians how to troubleshoot PLC's and drivers with the RS Logix 5000 software

#### **PROJECTS**

#### **GLASSWING INSURANCE WEB APP**

August 2019 - Present | Python, Django, SQL

- Built a web application to calculate environmental risk of a property and to show crowdsourced insurance data using Django and SQLLite
- Aggregated data using various APIs to calculate risk using history of earthquakes, air quality, and map data of a geocoded address

#### INSTATUTOR MOBILE APP

May 2019 - Present | React Native, Flask, MySQL

- Developed a mobile application to find tutoring services in a user's location
- Built front-end for application using React Native to create an easy to use responsive interface
- Developed back-end using Flask and MySQL to create and store user profiles and to send posting information to front-end
- Unit tested application using Python to test the interface and features

#### **NBA FINALS 2018 TWITTER ANALYSIS**

April 2018 - June 2018 | Python

- Collected and analyzed over 100,000 tweets using Pandas and Python
- Utilized RegEx to tokenize tweets and collect frequent terms
- Used NumPy, Pandas, and Vincent Python modules to analyze data and then produce data visualizations showcasing trends in tweets

#### **SKILLS**

**Programming Languages** 

Python, C, C++, CSS, HTML, JavaScript, Scheme

Technologies and Frameworks

SQL, Django, Flask, React,

Bootstrap, Azure, AWS, Firebase

### **EXTRA-CURRICULARS**

#### FRC TEAM 2056 ROBOTICS

2016-2018

- Gained experience with the process of designing of a robot and using various equipment during the build season
- Played key role as a member of the strategy and scouting team, collecting and analyzing both quantitative and qualitative data on robots
- Assisted with outreach programs, with a focus on youth in the community, such as running VEX IQ workshops at elementary schools and libraries

#### 2015-2018

- Won 2018 Provincials Independent Business Plan Event by presenting a 30 page business case to industry judges
- Won 2016 Hamilton Regionals Principles of Hospitality and Tourism Event
- Recruited members and represented school DECA chapter at events

#### **AWARDS**

- Governor General Academic Medal
- Taylor Steel Award for Proficiency in Mathematics

#### **EDUCATION**

#### UNIVERSITY OF WATERLOO

CANDIDATE FOR BACHELOR OF COMPUTER SCIENCE

2018 - Present | Cumulative GPA: 3.9

- Faculty of Math Entrance Scholarship
- Nortel Institute Scholarship
- Herbert J Schneider Scholarship

#### INTERESTS

• Robotics, Basketball, Soccer, Tennis, Hiking,