

# MALHAR SHAH

Second Year Computer Engineering Student  
Expected Graduation: May 2022

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## EDUCATION

**University of Toronto**

Sept 2018 – May 2022

Bachelor of Applied Science, Computer Engineering

- Dean's Honors List – Fall 2018
- Edward S. Roger Sr. Scholarship - \$3000 | Engineering Faculty Scholarship - \$2000

## SKILLS

**Programming languages:** C++, C, JavaScript, HTML, CSS, XML, MATLAB, Verilog

**Tools/Technologies:** Microsoft Office, Android Studio, Netbeans, Firebase, Git, Bash, Adobe Illustrator

## EXPERIENCES

**Husky Energy | Information Technology Intern**

May 2019 – Aug 2019

- Investigated and troubleshooted over 300 software and hardware incidents experienced by company end-users through computers, mobile devices, desk phones and other electronics
- Provided technical assistance by performing installation, repair and preventative maintenance of desk-side software/hardware in Windows and Linux/Unix systems to over 350 supported users
- Reported major reoccurring problems to coordinate an effective method of resolution

**Stantec | Project Engineering Intern**

Jan 2019 – April 2019

- Designed and developed renewable energy generation solutions for rural Canadian residents living outside of the electrical grid with my team of four engineers
- Coordinated design selections, adjustments and reforms to meet client expectations
- Tested and measured the success & reliability of the selected Vertical Axis Wind Turbine design

**Volunteer Engineering Experience Program | Project Management Team**

Sept 2018 – Apr 2019

- Collaborated with Non-Profit partner company: Brands for Canada to perform analytical research at their onsite storage facilities within a team of six engineers
- Launched sustainable design outlines for the client using various layout planning software including MATLAB, SketchUp, Adobe Illustrator, PackManager and Spreadsheets
- Redesigned the warehouse floor plans to reduce dead space and optimize efficiency & workflow

## SOFTWARE PROJECTS

**Personal Voice Chat-Bot Android Application | Java + JavaScript + XML**

Nov 2019

- Developed an automated verbal communication application that utilizes machine learning to communicate with users to help improve their mood and reduce their feeling of isolation
- Implemented a user database through storage via Firebase, language and communication with the chatbot via DialogFlow, and communication between different tools via Avaya's API

**Mini Soccer Game on FPGA Board | Verilog**

Nov 2019

- Programmed soccer game logic and game visuals on the FPGA board using Verilog to allow two players to simultaneously interact with game characters using a keyboard and monitor for display
- Utilized the DE1-SoC Development Kit and Intel Quartus Prime for game development

**Hand Gesture Recognition Tool | Python + JavaScript**

Sept 2019

- Created and trained a Machine Learning model utilizing an algorithm from the ImageAI library to recognize user hand gestures and automatically submit survey responses
- Designed a website using HTML, CSS, and JavaScript to collect the responses on localhost
- Winner of Hack The North – SurveyMonkey's API Challenge