# COMPUTER ENGINEERING

## SKILLS SUMMARY

#### SOFTWARE

- o Python o SQL
- HTML/ CSS O JavaScript
- $\circ \quad C \qquad \qquad \circ \quad Java$
- o VHDL o JIRA
- Confluence o Siteimprove
- Microsoft Office o Git

#### **HARDWARE**

- Oscilloscope, Multi-meter, Function generator
- > FPGA
- Arduino Uno

#### KEY COURSES

- Data Structures and Algorithms
- Microprocessor Systems
- Digital/Software Systems
- Electronic Circuits/Networks

#### **EDUCATION**

Ryerson University
BACHELOR OF ENGINEERING
Computer Engineering
Expected Completion: April 2021

# **ACCOMPLISHMENTS**

- Bell IT Business Case Competition, 1<sup>st</sup> Place
- Ryerson Engineering Competition
   3<sup>rd</sup> Place Programming Award
- Recipient of Engineering Academic Achievement Scholarship

# **CERTIFICATIONS**

- CCNA1(Cisco Certified Network Associate)
- o CCNA2
- WHMIS/EHS
- Emergency First Aid with CPR A

# INTERESTS

- New and innovative technology
- Competing in Hackathons
- Basketball Enthusiast
- o Fitness

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# WRICHIEK KAR

#### PROFESSIONAL EXPERIENCE

# Project Manager/Web Developer | Bell Canada

May 2019 - August 2019

- o Managing a team by using JIRA to create a backlog and track user story progress
- O Tackling major defects on bell.ca across 1,800+ pages and completing fixes for 10,000+ issues
- Building proof of concepts for voice assistant development tools such as structured data, DialogFlow, and IBM Watson, in order to facilitate future roll-out
- o Creating a conversational Slackbot capable of posting extracted data from a repository, and emailing reports

#### Fibre-Optic Technician | Bell Canada

May 2018 – September 2018

- Installed, maintained, and repaired telecommunications equipment, products and services, while achieving a 100%+ quality-effectiveness score
- o Resolved complex products and system issues using EXFO Power Meter and digital multi-meter
- o Provided an exceptional customer experience for small-businesses and homeowners

#### Engineering Student Ambassador | Ryerson University

September 2018 – December 2018

- o Represented Ryerson Engineering at on- and off-campus recruitment events
- Led tours and promoted Ryerson at events such as the Ontario University Fair (attendance of 100,000+ students)

# **PROJECTS**

Slackbot August 2019

Created a conversational bot using a Slack app and incorporating multiple API's such as RTM (Real Time Messaging) and files.upload. It was designed to request data at any point in time and have an up-to-date report. When prompted, it ran a script to scrape Siteimprove for updated data.

#### The Source Business Case, 1st Place

July 2019

Led a team to provide a solution regarding a corporate opportunity. Created a Loyalty Program which incentivized future purchases. Designed and implemented a public and authenticated website using HTML, CSS, JavaScript, and Bootstrap. User authentication was created using a real-time database. Once a login is attempted, a request is sent to the database verifying the credentials.

Microprocessor December 2018

Programmed latches, an Arithmetic Logic Unit, a Control Unit (contained a Finite State Machine and a 4x16 Decoder), using VHDL. The microprocessor was designed to be able to perform basic arithmetic functions using an FPGA board. The overall output was then displayed on a seven-segment display.

#### Ryerson Engineering Competition, 3rd Place

November 2018

Led a team which created a web application designed to help those in need with suicide prevention. Used HTML, CSS and Google DialogFlow to create a chatbot. It was tailored towards suicide prevention with custom responses by using common phrases and machine learning.

Robotic Arm May 2017

Created a custom robotic arm using an Arduino to control movements, allowing it to move at 3 critical points (base, lever arm, and claw). Designed all parts on AutoCAD and used a 3D printer. This led to lowered cost and reduced weight.

## **EXTRACURRICULAR**

#### Hardware Engineer | Ryerson Formula Racing

September 2018 - April 2019

- o Programmed sensors for vehicle data collection using SAM C21 Xplained Pro
- o Researched and sourced suitable parts for microprocessors considering efficiency, price and simplicity
- o Work alongside cross-functional teams to ensure product efficiency and optimize performance

# Awards and Excellence Committee | Ryerson University

January 2018 - April 2018

- Plan and host most prestigious event of the year (Night of Recognition)
- Designed awards and budgeted efficiently with \$1000