# Talha Rana

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https://github.com/talharana98

#### Education

## **McMaster University**

Hamilton, ON

B.Eng. in Electrical Engineering & Society (Year 4) Minor in Business

Class of 2022

# **Orchard Park Secondary School**

Stoney Creek, ON

High School Diploma

Sept, 2012-2016

# **Experience**

## **Technical Design Intern**

**Toronto Hydro** 

Toronto, ON

January 2020 - August 2020

- Created and modified electrical and civil station design drawing using MicroStation
- Handled job orders and billings valued over 250 thousand dollars for senior designers using SAP
- Interacted with customers with high/low voltage requests and communicated with construction teams, engineers and city officials to complete customer demands
- Extracted project data to analyze trends in Excel to ensure targets are being met/exceeded

# **Operations Manager Intern**

**General Motors** 

Ingersoll, ON

May 2019 - December 2019

- Supervised a team of thirty-six hourly employees in a unionized environment exceeding safety, quality and throughput standards
- Addressed downtime and bottlenecking issues using kaizen principals through problem solving initiatives such as job reconstruction & daily interactions with quality and engineering teams
- Worked with Allen Bradley PLC programming & trouble shot Fanuc robots
- Acquired BIQ IV certification by meeting quality levels and preparing necessary paperwork, training, torque/environment audits

#### **Marketing Manager**

Prep101

Hamilton, ON

September 2018 - May 2019

- Hired and supervised a team of marketers to promote PREP101 amongst students on campus and online
- Created and managed events, posters, promo booths, announcements, social media promotions to sell services
- Exceeded allotted targets for both school terms gaining more customers than previous years and surpassing monetary targets

## **Projects**

## **Angle Measurement - Esduino**

McMaster University

April 2019

- Implemented the main concept of Analog-to-Digital Conversion (ADC) to acquire an input analog signal and output it digitally to a computer using an accelerometer
- Developed an EsduinoXtreme program which analyzed the data, processed it, and transmitted the data into a digital value which was digitally processed and communicated serially
- Graphically plotted the communicated signal using MATLAB and outputted the angle inclination using LEDs on breadboard

#### **Prosthetic Hand Design**

McMaster University

April 2016

- Given the task of designing and creating a functioning prosthetic hand.
- Lead a team of 4 to design and simulate the prosthetic hand using AutodeskInventor.
- Calculating gear ratios and considering projects constraints/objectives, 3D printed a functioning model of a prosthetic hand capable of moving its index finger and thumb.

#### Skills

Python, Java, C/C++, MATLAB, AutoCAD, MicroStation, Microsoft Suite (Excel, Word, PowerPoint), Allen Bradley

PLC programming, Microcontroller programming using C, 3D printing, HTML, CSS, JAVASCRIPT, SQL, React