

# Umang Rajkarnikar

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## Education

### McMaster University

Hamilton, ON

B.ENG. ENGINEERING I (CO-OP)

2019-Present

#### Relevant courses:

- **Engineering Design and Graphics:** Gained understanding of various types of technical design and communication for engineers including solid modelling CAD, freehand sketching and simulation, visualization, and creation of engineering drawings. Worked with a team, and utilized computer-aided design (CAD) software to design a gear train and frame for a prosthetic hand.
- **Engineering Profession and Practice** Worked with a team to create a functional prototype for a client using various design approaches and strategies such as morph charts, objective trees, and creating medium-fidelity prototypes.

## Experience

### Business Systems Analyst Intern

Toronto, ON

SRK BUSINESS/ACCOUNTING SERVICE

Jan 2018 - August 2019

- Accurately processed 365 days of financial transactions in a short period of time. Increasing average typing speed from 50 words per minute (WPM) to 70 words per minute
- Generated and organized several types of reports through Excel and Simply Accounting. Allowing detailed information to be displayed to client in a simpler form.

### Camp Counsellor

Toronto, ON

TORONTO KIWANIS BOYS AND GIRLS CLUB

July 2017 - August 2017

- Initiated and monitored various activities for children in the summer youth program, and ensured that activities ran smoothly.
- Ensured that the needs of all members of the summer youth program were accounted for.
- Led a fundraiser with other camp counselors within the summer youth program and donated the profits \$200 to Sick Kids Hospital.

## Skills

**Software and Tools:** Tableau, PowerBI, Jira, NumPy, Pandas, Scikit-Learn, Microsoft Project, Visio, Access, Excel

**Languages:** Python, R, C#, SQL, VBA, MatLab, Java, HTML, CSS

## Projects

### Community Watch App

UoFT SCARBOROUGH HACK THE VALLEY IV

February 2020

- Worked with a team to develop a community safety app by implementing Geofencing API in which emergency services can drop a geofence around an area where a particular incident occurred.
- Utilized Android Studio and programmed in Java to develop the front-end of the app to create a Google-Map oriented app.

### iROBO-LIFT

McMASTER CAD DESIGNATHON 2020

January 2020

- Worked with a team to redesign the chassis for the iRobot Roomba vacuum cleaner to give it the functionality of climbing up the stairs.
- Applied concepts of technical design including solid modelling CAD, dynamic simulation, and visualization to compete the design challenge.

### Functional Orthotic Device

McMASTER UNIVERSITY

September 2019 - December 2019

- Worked with a team to create a functional prototype for a client that acts as a writing device. Solid modelling CAD was used during the assembly process.
- Applied various design approaches such as assembling different levels of prototypes and attending design reviews.

### Institutional Database

PERSONAL

January 2018

- Created a database utilizing C# to manage, modify, and update school records.
- Applied concepts of bubble sorting, file input/output, and arrays to organize records.