***Objective***

To utilize my past experiences and knowledge to achieve an internship position starting this May for 12-16 months, while gaining valuable knowledge and work experience from professional engineers while challenging myself in the field of Software Engineering.

***Skills***

Java

Android

Git

JavaScript

HTML

CSS

SQL

Linux

Full Stack

Node.js

PowerShell

Express.js

Agile

Angular

Jade

PHP

Python

C++

C

Matlab

Solidworks

XML

React

Batch

Bash

***Relevant Experience***

**Android Developer, Sidekick May 2017 – September 2017**

Katla Labs, Toronto, ON

* + Implement **Google APIs** to the application to increase the app usability to increase the user base.
  + Improved the **Native Android** app interface by fixing bugs and other problems reported on **Firebase** for a better user interface
  + Get user feedback to modify the app and add new features to the app accordingly

**Camp councillor July 2016 – August 2016**

Brick Works Academy, Toronto, ON

* + Managed a robotics camp for kids age 9-14 teaching them LEGO EV3 programming along side some robotics fundamentals

**Mentor/Volunteer/Planning Committee Chair Sept. 2012 - Present**

FIRST Robotics

* Take care of the logistics for the robotics event held at UOIT/DC by communicating details between Durham College/UOIT and FIRST Canada to have the best possible event at Durham College
* During FIRST Robotics Competition, assist teams regarding robot code and electrical control systems to ensure the robot works effectively during the competition
  + During Build season, offer expertise in control systems, strategy and programming to high school team that I have acquired over the years as a student on a FIRST Robotics Team
  + Inspired interest in STEM for FRC, FLL and Jr. FLL teams through volunteering at competitions and being a good role model by helping teams and ensuring the competitions are run smoothly

**Team President/ Control Systems Lead/Web Development Lead Sept. 2012 – April 2015**

Team 188 Woburn Robotics

* + Managed the team by communicating information between the mentors and students verbally to ensure good productivity between students
  + Coordinated meetings and designated work plans to sub-teams to meet weekly goals
  + Managed electrical and pneumatics components such as power distribution board, cRio, roboRio, sensors, solenoid, pneumatic pistons to create a functional system on the robot

***Education***

**Software Engineering, Bachelors in Engineers (BEng), Expected Graduation 2020**

* University of Ontario Institute of Technology (UOIT), Oshawa, ON
* GPA: 2.93/4.3

Relevant courses:

* Object Oriented Programming, Web Development, Design and Analysis of Algorithms, Data Management Systems, Microprocessors and Computer Architecture, Software Design and Architecture, Systems Programming, Computer Networks, Intro. To Artificial Intelligence, Operating Systems, Software Project Management, Software Quality

***Projects***

**FRC Scouting app February 2017**

Team 188 (<https://tinyurl.com/Team188Scout>) ([github.com/frcteam188/frc-team188-website](https://github.com/frcteam188/frc-team188-website))

* + Worked with another developer to create a web application to collect data on teams competing and provide real time information for the strategy team
  + Designed the backend using **express.js**, **PostgreSQL** for data storage and pure HTML/CSS and JavaScript webpages

**EZPay May 2016**

FinHacks (Honourable mention) ([github.com/VanshilShah/finhacks-2016-heroku](http://www.github.com/VanshilShah/finhacks-2016-heroku))

* + Collaborated with 5 individuals to develop a Web Application using **node.js** server to manage savings and pay bills through Text messages using Cisco **Tropo**
  + Utilized **pug** file format and express.js framework

**Checkpoint May 2016**

CISCO DevNet Hackathon (Third Place) ([github.com/VanshilShah/Checkpoint](http://www.github.com/VanshilShah/Checkpoint))

* + Collaborated with 4 individuals to develop an Android application that rewards the runners every time they reach new checkpoints
  + Maintained the application by using Cisco’s Zeus to both provide runners and business owners the ability to oversee potential development
  + Winner of the Zeus award for best utilization

**Outpost Jan - April 2015**

FRC Scouting ([github.com/parth-r-patel/outpost-polymer](http://www.github.com/parth-r-patel/outpost-polymer))

* + Worked in a group of 3 to create a web application using **Polymer 0.8** framework to collect data on the teams and view it real-time in order to enhance team’s strategy process during competition
  + Designed the backend using **PHP/MySQL** with our own REST API

***Academic Projects***

**Galton board simulator and Convex hull finder**

Data Structure, UOIT

* Programed a Galton board simulator using java to represent a normal distribution among randomly generated data and prove the Central Limit Theorem
* Developed a program using Java to find the convex hull for six different set of points in a CSV file and display on a graph

**Automated Lighting system and garage door opener**

Digital Systems, UOIT

* Programed and created smart automated lighting system prototype for a house using Arduino incorporated with a smart garage door opener as a set of smart home control unit

**Comparative Study (DE vs PSO)**

Design and Analysis of Algorithms, UOIT ([github.com/suthar26/Comparative-Study-Project](https://github.com/suthar26/Comparative-Study-Project))

* Conduct a comparative study, DE vs PSO, over various benchmark functions, including High Conditional Elliptic, Bent Cigar, Discus, Rosenbrock’s, Ackley’s, Weierstrass, Grienwank’s, Rastrigin’s Katsura with different complexities.

**Vanguard FRC**

Data Management Systems, UOIT ([github.com/suthar26/FRC-scouting-app](https://github.com/suthar26/FRC-scouting-app))

* Built an Effective Database Management System to manage the data collection at FIRST Robotics Competition and analyze the data to provide usable statistics.