Abilarsh **Vijiananthan**

Skills_

Languages Python, Java, Groovy, C, HTML, CSS, JavaScript

Technologies Git, Arduino, Linux, Android Studio, Selenium, Docker, Kafka, OpenCV

Experience _

Loblaw Companies Limited

Brampton, Ontario

ANALYST INTERN - INTELLIGENT AUTOMATION

Apr 2020 - Present

- Developed automation use-cases utilizing Groovy, Selenium, Powershell and Bash to reduce IT Tickets
- Conducted meetings to understand business processes and potential for automation
- Assessed potential benefits and savings of automation for business processes

McMaster University

Hamilton, Ontario

TECHNOLOGY INTERN May 2019 - Aug 2019

- Developed in house, end-to-end LoRa network and infrastructure using Docker, RPi, InfluxDB and Arduino
- Created Android app comparing access times between MQTT, RabbitMQ (AMQP), Kafka, and DDS
- Set up **Kafka** pipeline from OPC UA Server to retrieve server cooling data for monitoring and visualization
- Built IoT demo station showcasing various microcontrollers and communication protocols to guests

Xerox Research Centre of Canada

Mississauga, Ontario

Jul 2016 - Aug 2016

- **ELECTRONICS PRINT LAB TECHNICIAN**
- Prepared and tested substrates in the electronics print lab
- Replicated NFC Module in **Solidworks** for printing
- Optimized toolpaths to reduce print times by 20%
- Designed UI for capacitive touch interface using **Arduino** and **C#**

Projects_

Smart Unlock (UoftHacksVI)

Toronto, Ontario

HTTPS://GITHUB.COM/ABILARSHVIJI/UOFTHACKSVI

Jan 2019

- Developed **Android** App that allows the user to authenticate face and allow user to unlock the vehicle
- Set up SmartCar API backend using Python and Flask to handle unlocking the vehicle
- Utilized Microsoft Azure's Face API (Face Verification) to verify facial features

Boston Sidewalk Ratings (BostonHacks)

Boston, Massachusetts

HTTPS://GITHUB.COM/ABILARSHVIJI/BOSTONHACKS2018

Nov 2018

- Built **image classifier** that determines the quality of sidewalks for the City of Boston
- Gathered 400 images for training data by scraping Google Images using **Python** library
- Trained image recognition model using CustomVision.ai
- Tested model with images gathered from the Google StreetView API, and outputted the results to a webpage

GIGO Robotic Arm

Hamilton, Ontario

Sept 2017 - Dec 2017

ENGINEER 1P03 - FINAL PROJECT (Video Linked)

- Created 4 bar linkage arm to lift garbage cans for client who has cerebral palsy
- Utilized linear actuator, **Arduino**, joystick, and 3D printed components to develop arm

Education

McMaster University

Hamilton, Ontario

B.Eng in Electrical Engineering Co-op, 4th Year

Sept 2017 - Present

• Expected Graduation: Spring 2022

Online Courses

UDEMY/LYNDA.COM

Audited courses on Groovy, Docker, OpenCV, JavaScript, HTML, and CSS