

# Digen Gill

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www.github.com/digengill

www.digen.me

## EDUCATION

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B.Eng., Spec. Hons. Software Engineering  
York University, Toronto, ON

Expected May 2022

## EMPLOYMENT

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**Service Specialist Student, Co-op**

**BlackBerry Limited**

May-Dec 2021

**BlackBerry Service Engineering Team**

- Developed code to automate the building process & configuration of virtual machines.
- Reduced the overall VM build time from ~20 mins per batch to ~3 mins per batch.
- Setup Monitoring in Good Lab & Production environments using Prometheus. Built Grafana dashboards for monitoring various metrics.
- Built and deployed CI/CD pipelines in GitLab to auto deploy configuration on VMs.
- Converted BlackBerry's Good services' VMs to use the automation project (500+ VMs).
- Leveraged knowledge in Python development, Git, Virtualization and Automation, VMware vSphere, Bash scripting, Linux Administration, Terraform/Terragrunt, Ansible, GitLab CI/CD, PromQL, Postgres, and debugging Linux systems.

## SOFTWARE PROJECTS & OTHER EXPERIENCE

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**Personal Website:** [www.digen.me](http://www.digen.me) (for additional projects and information)

- Utilized: React.js, CSS, HTML (Front-end). Node.js, MongoDB (Back-end).

### Handwriting Recognition Application

- Designed a Convolutional Recurrent Neural Network (CRNN) with CTC layer to recognize word images into digital text. Trained with the IAM Handwriting Database. Achieved a 70% accuracy on testing data.
- Utilized: Python 3, Keras, TensorFlow 2.0, NumPy and OpenCV.

### Operating System from Scratch

- Wrote an Operating system with x86 CPU registers. Working components include interrupts (IDT and IRQ's), paging, keyboard & screen drivers, and ports.
- Utilized: C, x86 assembly, shell scripting.

### TalkBox Application

- Worked in a team to design and implement a Java application which aids the user to communicate.
- Developed a GUI-based Simulator and a Configuration application which allows a user to create .
- Utilized: Java, Git, JUnit Testing.

### York University Rover Team

2018-2019

- Worked in the development section of the team. Used the Robot Operating System (ROS) framework for the development of the robot.

## TECHNICAL SKILLS

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- Java, C#, JavaScript, C, Python, Eiffel, TensorFlow, RISC-V & x86 assembly, and MySQL.
- Able to design, develop, deploy, and support RESTful API services.
- Knowledge of the full software development life cycle.
- Experienced with Linux environment, bash scripting, and infrastructure as code tools.