



Harsh Gupta

📍 Canada

Software | Hardware | QA Engineer · 5 years of experience

Portfolio: harshgupta.dev

Who doesn't love coming up with new ideas and materializing them into reality?

[harsh2204](#)

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[guptah4](#)

Skills: Python Javascript MCUs React QA C Web Development Java C++ UNIX

Experience

IBM ibm.com

May 2019 to Aug 2020

Backend Software Engineer and QA Systems Manager Markham, ON

- * Revived and revamped the QA infrastructure, both software and hardware, for the DB2 install team.
 - * Authored the automation scripts for deployment of new hardware in various environments using Python, POSIX bash, and Playbook by Ansible.
 - * Wrote a validation failure classifier and tracker from the ground up, to automate and speed up the failure investigation process using fastText and other in-house text classification techniques, all backed by a Django back-end.
 - * Started a side-project on synthesizing audio books by splicing the input text in the right way so the TTS engine creates a flowing audio book. Actively looking for solutions to the problem of pronunciation of names for a better audio book experience
 - * Designed and proposed a transformer-based documentation generator to serve customers with common issues better.
- Software Automation
 - Failure Classifier and Tracker
 - Better Audiobook Synthesis

Minke Inc

Jun 2018 to Aug 2018

Python Developer Mississauga, ON

- * Wrote server-side code for business analytics in NodeJS with Power Bi integration.
 - * Designed an efficient way to handle and sort through the in-bound data for analytics using various ML-based web APIs including IBM Watson, Amazon Comprehend, Google Cloud Platform and Microsoft Azure API.
 - * Built a suite of Python scripts to increase automation in the system and save 60 man hours for every input dataset, using Pandas and the in-built Regex library in python.
 - * Handled off-site debugging and database management with efficient data storage methods on a SQL server.
- Big Data processing using Python
 - Asynchronous API testing

Education

McMaster University mcmaster.ca

Sep 2017 to Apr 2022

Bachelor's of Engineering, Software Engineering

Projects

Reverse-Regex-Crossword

github.com/harsh2204/Reverse-Regex-Crossword

A 3D implementation of regex crossword with a rule-based regex generator that uses vanilla and cef-python in the back-end with three.js for the front-end.

HTML, Python, JavaScript

RFID-PC-Security

github.com/harsh2204/RFID-PC-Security

A clunky security solution that uses the MFRC255 rfid sensor paired with a Hoodloaded2 Arduino Uno.

C++

Micropython-ESP-8266

github.com/harsh2204/Micropython-ESP-8266

This repo is a collection of my scripts for various scripts that I've written in Micropython for the NodeMCU board with the ESP-8266 chip

Python, HTML

Sumobot

github.com/isombeg/Sumobot

Big Mac Sumobot sketches

C++

mira

github.com/harsh2204/mira

MiRA – Medication Review Application – is an application that physicians and patients can use in order to gain more insight regarding drugs that they use.

Python, Java

Garbage-IOT

github.com/harsh2204/Garbage-IOT

A micropython project that provides weekly garbage/waste day information on a compatible micro controller like ESP32, ESP8266, etc.

Python