Harshdeep Singh Tomar

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LinkedIn | GitHub | Website

Objective

Strong in design and integration with intuitive problem-solving skills. Proficient in PYTHON, Golang, JavaScript and have worked with frameworks like ReactJS. Also Have knowledge of implementing CI/CD pipelines and containerization using Docker and Kubernetes. Passionate about implementing and launching new projects. Ability to translate requirements into technical solutions. Looking to start the career as an entry-level Software/DevOPS engineer with a reputed firm driven by technology.

Education

- S.T Paul's, Gwalior (9.2 CGPA)
- Kiddy's Corner, Gwalior (78%)
- B. Tech Electronics and Telecommunications | 2023
- 8.31 CGPA

Experience

2022/07 – Present

DevOPS Intern | Health Catalyst | Hyderabad

- Used Terraform to make various infrastructure creation scripts to automate creation of AWS infrastructure according to the given requirements.
- Implemented Simple CI/CD pipelines in Jenkins.
- Used Golang/Python to implement simple AWS lambda functions.
- Deployed Kubernetes clusters using AWS EKS. (Also automated that using Terraform)

Awards & Acknowledgements

- Worked as electronic and software lead in Team Black panther and Co-Created an E-bike which later won Future award at ISIE India E-bike challenge.

- Lead Team Alacrity Which Qualified for National level of Smart India Hackathon, securing 7th position regionally.

Personal Projects:

2022/01 – Present

Protonplus-ORG | Founding Member

- Proton**p**lus is a mobile operating system based on Android Open-Source Project (AOSP).
- We currently have 9 devices where you can install our operating system.
- It has been downloaded over 4700 times. (According to github stats)
- Look into our GitHub for more details.

2022/02 – 2022/04

RFID Based Attendance System | Minor Project 2

- It was a comprehensive attendance system that used RFID tags to mark attendance of the students/Staff. The system has two components.
- The first component is the web app. The web app was used by students to check their attendance and by Admin to manage the attendance and add/remove physical devices. The app was coded in plain HTML, CSS, and JavaScript, PHP was as the backend framework and MySQL was used for the database.
- The second component was the RFID hardware which was also made by me. The RFID hardware was based on NodeMCU ESP8266 which is a development board used for IOT devices. The RFID sensor used was the RFID-RC522 module. We used https GET and POST requests to send data to our server.
- For hosting the web app, we used Heroku and for running the app locally XAMPP server was used. The MySQL database was hosted on Heroku as well.

2021/08 – 2021/11

Pulse Oximeter Using ESP8266 | Minor Project 1

- In this project, I built a pulse oximeter using MAX30100 Pulse oximeter sensor and ESP8266, that will track the Blood Oxygen and heart rate and then send the data via internet by connecting to a Wi-Fi network. This way, we can monitor multiple patients remotely while maintaining social distancing with the patients. The obtained data can be shown as a graph or stored for future which makes it easier for tracking and analyzing the patient's condition.
- I also made a simple single page web application that runs on the local webserver running on the ESP8266 and uses AJAX to dynamically display the fetched the data from the sensor without the need of refreshing the page. This webapp can be accessed via any device on the

local network that has a web browser and supports JavaScript. It can be opened to be accessed via the internet using http tunnels or port forwarding.
- Its source code can be viewed on my GitHub here.

2021/05 – 2022/01

Aria2c Based Telegram Bot

- In this project, I built a Telegram bot that is used to mirror files on the internet to google drive. The bot was coded entirely in python and used telegrams python API wrapper to communicate via telegram.
- It was built up using previous open-source works and python libraries. It uses Aria2c to download files/torrents from the internet to the remote server where it's hosted on (I used GCP for it), then uses google drive API to upload it to google drive.
- It is an open-source project and its source code can be viewed on my GitHub here.