# **Sidharth Dinesh**

+91-7651820775 sidharth.d@students.vnit.ac.in Github LinkedIn Website

### **EDUCATION**

## Visvesvaraya National Institute of Technology, Nagpur

Bachelor of Technology in Electronics and Communication Engineering

**2018 – 2022** *GPA: 8.81/10* 

#### **EXPERIENCE**

**IoTIoT.in** Pune, India

Engineer Intern November-December 2020

# Remote-controlled 6-channel relay:

- Developed a code to switch 6-channel relay on/off based on a JSON file, which was parsed to read respective status values (ON/OFF).
- Established connectivity to Ethernet/Wireless for remote handling the relay through C++ curl-library.

# **IP Camera Monitoring Project:**

- Captured live CCTV footage using Shunya OS stack and detected objects and persons in the frame.
- Used InfluxDB for storing the time of detection of an object(s)/person(s).

**IoTIoT.in** Pune, India

Student Intern September-October 2020

Below are some skills acquired during a period of two months before start of internship:
• **Professional tools:** Git workflow and Gitlab, docker basics.

- **Programming languages:** Linux bash shell, C/C++ and Cmake.
- **IoT Protocol:** Sending webhooks to IFTTT (If This Then That) platform (HTTP) and sending data to Thingsboard platform using MQTT (Message Queuing Telemetry Transport).

## **SKILLS**

- Programming Languages: C/C++, Python, MATLAB, Basic Java for Android Programming, Flutter-Dart
- Web Technologies: HTML5, CSS3, JavaScript, Bootstrap, JQuery, Node.js-Express.js, React.js
- Libraries: NumPy, Pandas, Tenserflow, Keras, PyTorch, XGBoost, SciKit-Learn, Matplotlib, Seaborn
- Tools and Databases: Git, Linux, Docker, LaTeX, MySQL, MongoDB-Mongoose

PROJECTS GITHUB-LINK

## Framework for Edge Computing in Video Analytics Applications:

August 2021 - Ongoing

- Designed a dynamic machine learning based framework to decide which neural network (Big YOLO/ Tiny YOLO) must be used at either the front-end devices or at the edge server.
- Optimised to run on a real-time scene analysis on the surveillance feed to identify an object or person, without compromising on accuracy and utilizing minimum resources such as battery and data charges.
- Novelty of using multiple edge-servers over existing works which focus on a single edge-server (DeepDecision). Paper publication is under review.

# **Full-Stack Image Recognition App:**

May-September 2021

- Developed a complete web app with a React.js front-end, a Node.js-Express.js back-end server and a Post-greSQL database.
- Incorporated login and register functionality, and uses the Clarifai Face Detection Model API.

## **EXTRA-CURRICULAR ACTIVITIES**

- **Student Mentor:** Mentored a batch of 15 first year students.
- **Sports:** Secured **Gold Medal** in 110m Hurdles representing VNIT Nagpur in the ALL-INDIA INTER NIT ATHLETICS MEET held at NIT Rourkela on 24th to 26th January 2020.
- Socio-Cultural: Member of Halla Bol, the official Dramatics club of VNIT Nagpur. Performed 'Mime' in 'Aarohi', the cultural fest of VNIT Nagpur.