

Subhash Kumar

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TECHNICAL EXPERIENCE **Language:** (Python, CPP, C, Node.js) **Database:** (MySQL, Redis, ArangoDB)
Version Control: (Git, Gerrit)

WORK EXPERIENCES **Smartron** (September, 2017 – present)
Team Lead for IOT Hub application and cloud interface Team

1. Designing Software modules for Smart Home Automation Hub
 - Designing software architecture and model for IOT Hub
 - Designing cloud interface and process management for IOT Hub
 - Developed Home Manager Cloud and in device module for IOT Devices control and management from Mobile and Voice command
 - Developed Rest API to control Smart IOT Hub from Mobile App.
 - Developed Rule Engine for Smart device control based on specified time or Specified Sensor value.
 - Designed Voice Assistant module for Home Automation Hub
2. Allocating job and workload to individual team member based on their ability
3. Making sure task should be done on time and to the required quality
4. collaborating with other team and sync up with common issue and development

Smartron (July, 2016 – August 2016)
Operating System Management and application development for t-home

1. Container based Application research and development
 - Research on docker, lxd based container
 - Research on snappy core, proposed IOT Hub architecture and development
2. Application and IOT Hub application management architecture design
 - Built User Model for IOT Hub
 - Built Security & Authentication Model
 - IOT Hub App Engine
 - IOT Data storage POC for t.home using ArangoDB
3. Designed and Developed Software Development Kit for IOT Hub

INTERNSHIPS AND PROJECTS **Home Monitoring System**
Smartron (June, 2015 – Aug, 2015)
Developed an economical and Reliable System to Monitor Home using different parameter like Temperature, Humidity, Live video etc. It generates warning based on processed data. RPI was used as a central Machine for server and controller to feed data generated by sensor. Analysis was done on the data obtained and was shown as a Notification warning in a website.
Technology RPI, Python, Bootstrap, PHP, HTML

PROJECTS **Network Management in Software Defined Network**
Supervisor: Prof. Timothy A. Gonsalves, Director, IIT Mandi (August, 2015 – June 2016)
QoS Service and traffic Engineering in Home/Enterprise Network using Open-flow and SDN Concept and reliability in that System.
Used Open-flow, Mininet, Pox (Python based Controller), Traffic Classification technique and QoS Policy.

- The major problem in the project to be tackled is to provide QoS and **service priority** on per user choice.
- **Different preference** option for different service and user.

- Easily deployable and controller running on cloud server.
- Used SQL and Json for data parsing.

Globalone

(April, 2015 – July 2015)

Built an **interactive organized photo base**, which had features like upload images, **buy/sell images**, **tag based auto complete search**, like or dislike, **paginated feeds**. Developed this app using **Django web-framework, MySQL, HTML5, Bootstrap CSS, AJAX**.

Won the **first prize** out of **15 teams**, for this project.

Network traffic analyser

(Feb, 2014 – June 2014)

CLI Tool to Monitor **Network traffic** and generate Graph.

Used **bash, SNMP, nmap, Python, gplot**.

url: https://github.com/Subh94/Traffic_Analyzer-

Anti-collision System for blind turns

(August, 2013 – November 2013)

Develop a Product to detect vehicles on both side of blind curve and prevent accident, Specially in Fog area.

This will give warning through light, sound or both based on weather condition.

Used **C, Arduino** for this project.

Hotel/Canteen Ordering System

(March, 2013 – May 2013)

Hotel Management System which has feature like Order food, book Table/Room, give rating to service, promotional offer and a Admin interface.

Used **PHP, MySQL, HTML, CSS**.

EDUCATION

Indian Institute of Technology Mandi, India

B.Tech in Computer Science and Engineering with Minor in Management August 2012 – June 2016

- Cumulative Grade Point Average: **6.98**

Gaya College, Gaya (Bihar), India

Senior Secondary(B.S.E.B.)

2011

- Cumulative Average: **66.4%**

Janta High School Dumariya, Gaya (Bihar), India

Secondary(B.S.E.B.)

2010

- Cumulative Average: **71%**

RECOMMENDATION **Prof. Timothy A. Gonsalves**

Director, IIT Mandi

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