# Shubham Agrawal

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🔾 github.com/ShubhamAgrawal-13 in in/shubhamagrawal13

## **EDUCATION**

International Institute of Information Technology, Hyderabad

Master of Technology, CSE

Medicaps Institute of Science and Technology, Indore

Bachelor of Engineering, CSE

St. Mary Champion School, Indore

Senior Secondary Certificate

St. Mary Champion School, Indore

Higher Secondary Certificate

July 2019 - Present

ouly 2019 - Present CGPA : 9.89

Aug 2015 - June 2019

CGPA:8.8

July 2013 - June 2015

PCT : 92

July 2011 - June 2013

CGPA: 8.2

## **PROJECTS**

#### **Distributed IOT Platform for Smart Cities**

Feb 2020 - May 2020

- Implemented a distributed platform that provides build, development, and deployment functionalities. The platform will be able to deploy and run applications that can be used to manage a smart city. The platform is robust and fault-tolerant.
- o Technologies used: Docker, Flash, Python and Kafka

## Wiki Search Engine

Aug 2020 - Sept 2020

- o Dataset: 42GB Wikipedia english dump
- o Pre-processing: Stemming, Lemmatisation and Multilevel Indexing
- o Ranking: TF-IDF Score and Cosine Similarity
- o Searching: Phrase queries and Field queries

#### **Image Classification**

Feb 2020 - Mar 2020

- o Datasets Used: MNIST dataset and CIFAR-10 dataset
- o Pre-processing: Centering and Scaling of images and Dimensionality Reduction (PCA)
- o Classifiers: SVM, Logistic Regression, MLP and CNN

Chat App May 2020 - Jun 2020

- o Developed a chatting application in Android using Firebase Realtime database.
- o Features: Authentication, Password Reset, Messaging, Profile image and Notifications

#### Version Control System

Nov 2019 - Dec 2019

- Developed a Version Control system in Python.
- o Functionalities: init, add, status, commit, rollback, retrieve, log, diff, push and pull

Mini torrent Sept 2019 - Oct 2019

- o Developed a Peer-to-Peer group based file sharing system.
- o Functionalities: Chunk based sharing, Centralized tracker, Piece selection algorithm
- o Technologies used: C++, Socket Programming and Multi-Threading

Smart Home Oct 2018 - Dec 2018

o Developed a smart home system with Raspberry pi 3 and also an android app to operate it.

- o Functionalities: Controlling home Appliances, Door Lock, Security system, Notifications via email
- o Technologies used: Python, Android and Socket Programming

# TECHNICAL SKILLS

- o Programming Languages: C, C++, JAVA, Python, Shell Scripting
- Web Technologies: HTML, CSS, JavaScript, XML
- o Development: Flask, Android, Docker
- Databases: MySQL, Oracle, Firebase(Realtime)
- Version Control: GIT

# **ACHIEVEMENTS**

o Secured AIR 388 in GATE 2019

**March 2019** 

# **AWARDS**

o Chancellor's scholarship, RGPV, Bhopal

July 2018

o Shri Dewang Mehta Excellence Award July 2016