# **MOHIT KUMAR SINGH**

IIT HYDERABAD|| M.TECH (IOT & 5G)

### **EDUCATION**

2017 - 2020	M.TECH, IIT HYDERABAD Majors: IOT and 5G	8.34/10
2013 - 2017	B. TECH (CSE)  JSS ACADEMY OF TECHNICAL EDUCATION, NOIDA (UPTU)	80.1%
2013	XII CBSE   SIMPKINS SR. SEC. SCHOOL	93.4%
2011	X CBSE   SIMPKINS SR. SEC. SCHOOL	93.8%

### CAREER HIGHLIGHTS

Persuing M.Tech from IIT Hyderabad

### IOT Application Development

Functional, performance, regression work-flow testing of new features developed in InDesign

### C/C++ Development

Working closely with the customers to validate the work-flows for various new features

### Web Development

Continuous interaction with the customers to resolve their issues post go-live of product

## PUBLICATIONS & ACADEMIC PROJECTS at IIT HYDERABAD

### **PUBLICATIONS**

MobiCom'18 poster titled: "WiFi user's Video QoE in the presence of Duty-Cycled LTE-U"

### **COMPLETED PROJECTS**

### Sending Contextual Suggestions on the basis of user usage behavior/pattern:

Informing user about its next activity on the basis of the pattern extracted from his usage

### Media Transmission over LTE-WiFi coexistence

Successfully sent the media file(.mp4) over LTE-WiFi coexistence

### **Implemented DNS-Server**

A Tool that maps between the host-name and IP address using bind tool Implmented

### Traceroute: A network diagnostic tool

A well written application in php, that behaves like a traceroute and finds a reachable path to the destination host along with the delays

### ON-GOING PROJECTS

## Natural Language Processing: An Approach for automatic topic generations. Building Cloud Native Solution for future RAT's like 5G

Working to completely evolve the LTE-EPC architecture to a cloud native solution so as to have better scalability & resource utilisation and network slicing.

## **ACADEMIC PROJECTS at JSS Noida**

### Summer Internship at Air India, New Delhi from June'16 to July'16.

Project Title: "Enhancement of the website <u>www.mccairindia.com"</u>

**Project Task**: I have added some new functionalities related to their departmental requirements and sorted out some existing bugs in their old site and hosted the complete site on GoDaddy.com.

### Done Academic project on "Gray Hole and Black Hole attack on MANET",

as my final year academic project, which is related to the detection and removal of malicious nodes in our computer network and strengthening our Computer Network Security.

Presented presentation and report on the topic "Internet Of Things" as my Pre-final year project.

### **KEY COMPETENCIES**

- Strong hand in Data Structures
- Development of Algorithms
- Building innovative and technologically advanced prototype or IOT
- Building Scalable and Virtualized
   Network Functions for 5G using Docker.
- Monitoring VNF's using PROMETHEUS

### ACADEMIC DISTINCTIONS

- Ranked 3769 in UPSEE 2013 examination.
- Scored full CGPA in Mathematics, Science, Social Studies and Hindi in class 10th.
- Awarded with the certificate of Excellence by Amar Ujaala for the performance in class
   12<sup>th</sup>
- Scored 97 marks in Mathematics, Physical education in class 12<sup>th</sup>.

### **COURSES**

- Completed the course on the topic PHP and PHP with MySQL by Kevin Skoglund on Lynda.com.
- Completed the course on the topic Algorithms and Data Structures by University of California on Coursera.com.
- Completed course on Docker on Lynda.com authored by Professional at Yummly
- Completed course on Kubernetes, on Lynda.com.

## **REWARDS AND RECOGNITION**

- Represented our college in ACM-ICPC 2015 regional onsite round held in Hindustan University, Chennai.
- Cleared the first round of ACM-ICPC 2015 Amritapuri regionals.
- Regular participant in solving the programming questions on various coding platforms like Codechef, Spoj, Hackerrank, Hackerearth.
- Won two competitions in our college fest **ZEALICON-13** and **ZEALICON-15**.

## **EXTRA CURRICULAR ACTIVITIES**

- Volunteer for conducting NCC, National Conference on Communication at IIT, Hyderabad.
- Qualified to pre-final Level for Company-wide Idea Hackathon.
- Continuous participation in Codechef, online coding platform.
- Manager at Inter-Year Sports Event at IIT Hyderabad, for Table Tennis.

### **TECHNICAL EXPERTISE**

### Software Known/Technical Tools

- Eclipse
- Perforce
- GITHUB
- NS3 (Network Simulator)
- LXC (Linux Container)
- Brackets.
- Net Beans,
- Dev C++,
- TurboC,
- Code Blocks.
- XAMPP
- AWS-api framework
- Visual Studio
- GCE(Google Compute Engine)
- Docker
- Prometheus

## Languages and Frameworks

- Python
- C and C++
- HTML
- CSS
- JavaScript
- SQL

### Operating Systems

- Windows
- UBUNTU