# Mohit Kumar Singh

http://home.iitk.ac.in/~mohitks mohitks@iitk | 7318.019021

### **EDUCATION**

#### **IIT KANPUR**

BTECH IN CHEMICAL ENG.

Apr 2020 | Kanpur, India Cum. GPA: 8.5/10

#### INTERMEDIATE CBSE

Phy•Chem •Maths •Comp APR 2016 | DAV, Jamshedpur Cum. GPA: 94.8%

MATRICULATION - CBSE BOARD

APR 2014 | SJDAV, CBSA Cum. GPA: 10/10

#### LINKS

Github:// MohitKS5 LinkedIn:// mohit-singh-iitk Gmail:// mohitkumarsingh907

# SKILLS

#### **PROGRAMMING**

Over 50.000 lines:

Golang • Postgres • CSS • React TypeScript • Angular 6 • Material Over 10,000 lines:

Node|Express • Flutter • MongoDB

#### Technologies:

ELK • Cloudfront • S3 • SES • Stripe lightsail/EC2 • Cloudwatch • Shopify

#### Toolchains:

Docker • Bash scripting • QOR

#### **OTHERS**

Utilities:

LATEX • HTML/XML • Git • BitBucket Android Studio • Microsoft Azure • Emacs

# ACHIEVEMENTS

#### **JEE ADVANCED'16**

AIR 1964

Among 1.5 Lakhs top JEE Mains qualified aspirants from all over India.

#### **JEE MAINS**

223/360

Secured place in top 0.1% of 1 Million+candidates.

### INTERNSHIP PROJECTS

#### **CLASSENGAGE.COM** |LEAD SOFTWARE DEVELOPER

Oct 2019 - Jun 2020

- Developed a secure REST API in Go integrated with payments, zoom
  meetings, push notifications, cloud storage and streaming, email and sms
  promotions handling multiple-apps with interconnected data comprising of
  several databases. Amounts to 300+ fully documented endpoints.
- Prepared a Web UI for clients to manage their apps' payments and resources.
- An admin portal with fully **automated production flow**. On new client: add database, establish connections to client ui and api, build apk and set up metrics for monitoring on single click.
- Used cutting edge technologies for production environment **ELK** stack logging, cloudfront **caching**, **FCM** notifications and cloudwatch monitoring.

# CHOWKIDAAR-ELASTIC STACK WATCHER | NoBroker Intern

13 May 2019 - 30 May 2019

- Created a **MERN** application integrated with **elastic search** engine to calculate and **notify** inconsistencies in data as alerts on slack.
- **Visualization** of realtime data using dynamically generated scripts for **Kibana**.
- Completely **dockerized dev**elopment **& prod**uction configurations.
- Opensource product with intuitive material UI and JSDOC documentation.

# LEAD CREATION MIRCROSERVICE | NoBroker Intern

20th June 2019 - 12th July 2019

- Created MERN application to smartly show a list of **recommended properties** based on **organic search** and recent **user-specific events**.
- On site Call support and scheduler to connect customers and fix appointments.

# MERGE SORT AS FINITE STATE MODEL (FSM) | NoBroker Intern 1st June 2019 - 4th June 2019

- Task to **sort 15000 images** in least possible manual comparisons.
- Implemented merge sort as a **five state sequential model** governed by post requests between **UI & node server**.

# MARKET EXCHANGE API & ADMIN PORTAL | BITPARX (STARTUP) May 2018

- Developed an application in **Golang** for bitcoin market based on binance.
- implemented Websockets for real time data endpoints such as market tickers.
- mail service for mass mailing, email verification, advertisements and stuff.
- Frontend to the market api, featuring **real time tickers**, order, transactions.
- **Asset management.** Net volume held in various servers, candlesticks, relevant graphical representations and **level based authentication system**

#### FREELANCE

#### **DEMAARS** | BACKEND DEVELOPER

June 2020

- REST API for an Gems Ecommerce store with all features amazon offers.
- Admin portal for Content management, refund requests, customer management and delivery tracking.
- Heavily cached content in Redis for millisecond response times, international payments and multilingual content support.

# **PROJECT LINKS**

#### FREELANCES/INTERNS

FinerEdge:// fineredge.net Classengage:// classengage.com Demaars:// demaarsgems.com

#### ANTARAGNI

Antaragni'17:// old.antaragni.in Antaragni'17 App:// Play Store Antaragni'18:// antaragni.in Admin Portal:// backend.antaragni.in Campus Ambassador:// ca.antaragni.in

#### **TECHKRITI & FSAE**

Techkriti:// techkriti.org IITKMS:// sae@iitk

# NON SCHOLASTIC ACTIVITIES

# FORMULA BHARAT COMPETITION FSAE. India

15th position out of 80+ cars all over india Prepared and participated in cost event

#### **ROBOTRICKS**

Takneek 2016 | Tech Competition 2nd Runner Up

Designed and fabricated a Robot that is capable of gripping and lifting objects.

#### DESIGN O' FLARE

Takneek 2016 | Tech Competition Runner Up

Utilized DS Solidworks 2016 to develop an experimental apparatus. Points awarded for complexity, detail and resemblance.

# COURSEWORK

#### **SOFTWARE**

Fundamentals of computing Computational Methods Data Structure and Algorithms Advanced Algorithms Computer Organisation & Architecture Database Management Computer Networks

#### **COURSE PROJECTS**

Ecommerce Web app (Database) Irrigation system (Technical Art) Herb infused oil (Process industries) Napthali Sandlom Algoritm (Matlab)

#### **CAMPUS HAAT | FRONTEND DEVELOPER**

Dec 2018

• Frontend in angular 6 for a online buy and sell store for universities.

#### FINER EDGE | FLASH DEVELOPER

Dec 2017

- Prepared a website for the finer Edge, multinational architectural company.
- Displayed Gallery of 800+ Pictures in an elegant way with slides and collages.
- Adhered to the demands of the client resulting in finalization with mere 2 drafts.

### **UNIVERSITY PROJECTS**

# ARES, APHRODITE | ANTARAGNI'18 BACKEND AND FRONTEND

Mar 2018 - Oct 2018 | IIT Kanpur

- Use of firebase cloud functions, google cloud storage and cloud firestore for databasing and storage.
- Registration, Payments and database management integrated with townscript API for various events and competitions to be held during the fest and in various cities pre-fest.
- Facebook login and data fetching from graph API. Fetching posts from antaragni page and allow sharing on fb from the website.
- Provided a flexible frontend managed by a GUI interface in a user-friendly way.
   Implemented real-time editing using three-way binding of websockets and angular frameworks.
- Milliseconds navigation performance by optimized image imports in webpack format and server side rendering using angular universal backed by extensive caching of service workers.

#### BABYLON | ANTARAGNI'18 ANDROID + IOS

Jun 2018 - Oct 2018 | IIT Kanpur

- Built android cum iOS app for antaragni using flutter framework in dart.
- App remained Trending for a month since launch, even reached 1 for the fest week.

# POSITIONS OF RESPONSIBILITY

#### ANTARAGNI'18 | HEAD, WEB

Expected Apr 2018 - Oct 2018 | Cultural Fest, IIT Kanpur

- Lead the designing of **8 websites** and **2 apps** from scratch featuring Antaragni.
- Registration and Payments for **8000 participants** from **300+ colleges** opting for 10 professional events and 70 competitions.
- Angular 6 framework with material UI, supported by firebase backend.
- Facebook integration for login and post sharing, written in **typescript**.

#### TECHKRITI'18 & ANTARAGNI'17 | SENIOR WEB EXECUTIVE

May 2017 - Mar 2018 | IIT, Kanpur

- Full **MEAN** stack written in typescript. Frontend, Angular 2 with material.
- **Dynamic** website with flexibility in design and content.
- Provided a flexible UI to update the contents of frontend in a **user-friendly** way.

#### FSAE | WEB DEVELOPER & CHASSIS TEAM

Jan 2017 - Jan 2018 | IITK Mototorsports

- Built a Web Application from scratch using Angular 4 as the framework.
- Implemented Firebase authentication, cloud storage and **real-time** databasing.
- Exposing the potential of team in a representative manner to **lure the sponsors** and car enthusiasts.