# Sankalp Mukim

4th year B.Tech student

### **EDUCATION**

# Vellore Institute of Technology, Vellore

B. Tech- Computer Science Engineering

September 2020 - August 2024

Vellore, India

G. D. Goenka School, Karkardooma

April 2011 - March 2020

East Delhi, India

CBSE(Class 12th) - Percentage - 94%

### TECHNICAL SKILLS

Languages: Typescript, Go, Javascript, Python, C, C++

Technologies/Frameworks: React JS, GoFiber, GORM, Node JS, Graph QL, AWS, Azure, GCP, React Native, Python, Django, Flask, FastAPI, Docker, PostgreSQL, MongoDB, Tailwind, NestJS

#### EXPERIENCE

ION Group

Delhi NCR

Software Engineer · Barracuda FX (Infra team)

Jan 2024 - Present

- Led AWS Cost reduction project: Used modern AI and automation driven tools to drive down AWS spending 50%. Set company-wide standards for responsible best practices management of AWS.
- System Administration and DevOps: Created and Managed internal development environments. Built automation using Python, Shell scripting, and Docker. Performed Database migrations, backups and restores. Deployed software on AWS using best practices such as Infrastructure as Code (IaC) and set up CI/CD pipelines.
- Built and managed monitoring suite used by everyone: Built a complex and comprehensive monitoring tool that involved a Python based data pipeline, data categorization/refinement tool in React + Python + MySQL, PowerBI reports, and HTML Reports. These were used internally for monitoring system health as well as sent to clients.

North of Zero

Remote

 $Software\ Engineer\cdot Autogenie$ 

Jun 2023 - Aug 2023

- Payment Gateway: In charge of writing integration for the Amazon Payment Gateway (Formerly known as Payfort) service in both React website and React Native application. Used a combination of their SDK and web fundamentals to achieve the desired result.
- Backend improvement and integration: Create Transactions entity to reliably keep track of all transactions. Update state of each transactions using a combination of webhooks and health checks to provide the user and the admins with the most accurate information. Helps the stakeholders deal with financial transactions securely.
- Integrate OTP in Auth: Used AWS Lambda functions in AWS Cognito to setup a Custom Auth Flow designed for the purpose of Mobile OTP Authentication. Also used AWS SNS for sending the SMS.
- Devops: Be on call and handle deployments and CI/CD for multiple projects and help the team with integration best practices.

**Indiahikes** 

Remote

 $Software\ Engineer\cdot\ TrekVitals$ 

Oct 2022 - Jan 2023

- Google Sheets API Service: Use the Google Sheets API to feed data and help prepare the dashboard using a Google Cloud Service Account. Due to code complexity and UX concerns, the best approach to securely interact with the data was to put this behind a NestJS Backend. Chose NestJS for structural simplicity and similarity to team's existing Java Backends. Validated Kaycloak tokens for checking authenticated requests.
- Integrate Keycloak: Replaced an existing simple Email Password deprecated Auth system with a more secure and versatile Keycloak powered auth system. Dealt with App links and mobile browser for third party authentication protocols (OpenID)
- Shift and coordinate to new backend: The main objective of the TrekVitals project was to revamp the app and move from the deprecated old backend to new Java Backend. I coordinated with multiple product and backend teams to manage features and change endpoints, data structures.

Remote

Software Engineering Intern  $\cdot$  Beaming White ERP Frontend

Jan 2021 - Mar 2021

- React App Development: Worked on integrating a React-Admin dashboard application with a Hasura powered GraphQL backend. Made an ERP program to manage marketing leads from scratch.
- Support Backend development and configuration: Helped with AWS SNS integration for sending and verifying OTPs. Dealt with generating and validating JWTs. Improved and updated Postgres schema for dealing with feedback and improving features.

### **PROJECTS**

### Cryptic Hunt O | Z | Typescript, Prisma, Postgres, Firebase, Node-Cache, Docker, AWS

Oct 2022

- Lead a team of engineers to design and deploy a Frontend and a Backend multi layer system that had **over** 500 Concurrent users.
- Designed an efficient and highly normalized Database schema along with several indexes to provide the full leaderboard in an efficient manner using caching.
- Configured database replicas to scale horizontally according to demand

# Court Hero O | Z | Raspberry Pi, Python, OpenCV, NextJS, Auth0, FastAPI, Docker, WebsocketsMar 2023

- A distributed ML and Computer Vision (OpenCV) powered architecture that can scale horizontally as per need. It delivers information in real time to the end users using Web Sockets.
- Raspberry Pis analyse badminton courts in an efficient polling approach for most accurate results. It sends information to the backend. The frontend connects to backend using websockets and shows info in Real Time.

### VIT WiFi Connect O | 🗗 | React Native

Mar 2023

• Published an Android app that helps student connect to WiFi in a single click. Helps avoid VIT's Clunky WiFi portal site.

## Numpuz O | C | React, Firebase, React Context, Dark Mode

Mar 2023

• Multiplayer UI intensive interactive puzzle based game. Built using ReactJS with a Realtime leaderboard.

#### CERTIFICATIONS

- AWS Certified Solutions Architect Associate AWS
- Practical Networking Udemy
- Nginx Udemy

### EXTRACURRICULAR

# Association for Computation Machinery - VIT

Dec 2021 - Apr 2023

(Web Dev. Devops)

Vellore Institute of Technology, Vellore

- Worked on a game event backend that scaled for over 500 concurrent users reliably during the duration of the event.
- Scaled applications, handled devops for real userbase and following. Used and taught Typescript, Go, NodeJS, Prisma, ReactJS in my chapter.

VITspot

May 2021 – Jul 2022

(Web Development)

Vellore Institute of Technology, Vellore

• Developed a student friendly calendar integration tool that saw 500+ daily active users.