# GOKUL KANNAN R

Garvebhavi Palaya, Bangalore 560068

## Education

## Indian Institute of Technology, Hyderabad

Bachelor of Technology in Computer Science and Engineering

July. 2019 – May 2023

Hyderabad, Telengana

### Relevant Coursework

• Data Structures

• Algorithms

- Database Management
- Operating Systems
- Computer Networks
- Computer Architecture
- Artificial Intelligence
- UI/UX course by Google

## Experience

#### BlueStone Jewellery and Lifestyle

June 2023 – Present

Software Engineer

Bengaluru, Karnataka

- Working on migrating the **Billing software** used in shops to **React** which will improve the **user experience** at stores. Tech stack involved **React**, **Vite**, **Redux**, **Tailwind CSS**, **React Router** .
- Worked on a microservice to get similar jewellery designs based on image uploaded using Faiss, Python and Django.
- Worked on a project that aims to improve customer experience in stores by using RFID for scanning products.
- Tech stack includes **Spring Boot, Next.JS, React Native, Electron JS, MicroPython, MySQL** and hardware used are Raspberry Pi Pico, MFRC522 RFID reader, MIFARE and NTAG NFC tags.
- Wrote build and deploy bash scripts for the project and deployed it to AWS EC2 instance.
- Collaborated with team members using tools such as **Git**, **Subversion**, **Jira**, **Bit Bucket**, **IntelliJ IDEA**, **Android Studio**, **VS Code** to organize modifications, review changes and assign tasks.

## Samsung R&D Institute, India

June 2022 - July 2022

Software Engineer Intern

Noida, Uttar Pradesh

- Created a server-client in python using **socket programming** to transfer ML models from server to client.
- Solved a packet loss issue where some packets were missing in the client but the server has sent.

## **Projects**

## Expense Tracker App | Next.JS, Typescript, PostgreSQL

July 2024

- Created a web app using Next.JS to track expenses that is fully typesafe using **Typescript**, **tRPC**, **Zod**, **Prisma**.
- Used Tailwind CSS, ShadCN for creating a modern UI.
- Used modern features of Next.JS like SSR (Server side rendering) and SSG (Static site generation).
- Used discord for authentication, **PostgreSQL** (in Supabase) as the database and deployed it to **Vercel**.

#### Multimedia Chat application | React Native, Firebase

August 2022

- Created a multimedia chat application in **React Native** using **Firebase** as the backend.
- Used **Firestore** as the realtime database to store users, chats, messages, etc. **Firebase authentication** for authentication and **cloud storage** to store images.
- Implemented Firebase security rules to prevent unauthorized access to messages and media.

### Grievance Management System | Django, ReactJS, PostgreSQL, Python, JavaScript, Firebase

August 2021

- Developed a web app where people can post grievances and authorities can resolve them. Users can **upload images**, include which department is responsible for solving a grievance, etc. when posting a grievance.
- Used firebase for authentication and wrote a custom authentication class in Django to use JWT tokens for auth.
- Implemented a **role based authorization** system, where each role had specific permissions and the UI changes based on the signed in user's role.
- Implemented a notification system using **cron jobs** where authorities are **notified** to resolve a grievance that they have been assigned at regular intervals and if a grievance isn't resolved within a time window, it is **escalated** to the higher up.

### Technical Skills

Languages: JavaScript, Python, Go, C, C++, Java, SQL, HTML/CSS

Frameworks: Next.JS, React, React Native, HTMX, Spring Boot, Django, Tailwind CSS

Technologies: AWS, Firebase, Supabase, Raspberry Pi, Mongo DB

#### Achievements

All India Rank 4296 in Joint Entrance Examination (JEE) Advanced, 2019

All India Rank 1325 (99.898 percentile) in Joint Entrance Examination (JEE) Main, 2019

Kishore Vaigyanik Protsahan Yojana (KVPY) Scholar, 2019 National Talent Search Examination (NTSE) Scholar, 2017