Saumya Kumar Thakur

New Delhi, Delhi

Experience

Standard Chartered and Research(SOLV)

Feb 2024 – Present

Software Engineer (Intern to Full-Time)

Noida, India

- Spearheaded the **redesign** of the intra-city **seller interface** for an **E-commerce app**, enhancing **UI/UX** and increasing seller productivity.
- Led the development of an auto-update feature for a Supply Chain Finance app, ensuring seamless updates.
- Designed a force update mechanism to enforce mandatory updates, ensuring all users had the latest version.
- Optimized data handling: Reduced database load by 60% and enhanced scrolling performance by fetching only necessary data for order listings. Full data retrieval occurs only upon item click.
- Employed Model-View-ViewModel (MVVM) architecture, Hilt for dependency injection, Retrofit for network operations, Room DB for data storage, and Kotlin for development.

Cadence Design Systems Pvt. Ltd.

 $June\ 2023-August\ 2023$

Software Engineer Intern

Noida, India

- Engineered an algorithm to efficiently **model physical cells** by distinguishing substantial cells from smaller ones. This optimization focused on prioritizing critical elements, which **reduced** the number of **channels cut**.
- Achieved a 22% reduction in Place Opt Design (POD) time, equivalent to 145 minutes, by improving BFS traversal efficiency through the cell modeling algorithm.
- Developed a **Tool Command Language (TCL)** command to automate analysis of floor plans across **13 metal layers**, extracting blockage dimensions and coordinates, resulting in efficient design analysis.

Projects

CloudNotes | Kotlin, MVVM, Hilt, Room-DB, Retrofit, Express-JS, Mongo-DB | Project Link

4

- Engineered an Android app leveraging **Kotlin**, **Hilt** for Dependency Injection, and **Retrofit** for network calls, with robust offline access via **Room Database**.
- Architected an advanced API using Express-JS, integrating JWT (JSON Web Tokens) for enhanced security.
- Built a seamless login/signup feature with user sessions managed via Shared Preferences for auto sign-in.
- Implemented the Model-View-ViewModel (MVVM) architecture to enhance scalability and maintainability.
- Enabled **real-time data synchronization** between local **Room DB** and remote **MongoDB**, providing robust data backup and cross-device accessibility.

Advanced TCP Group Chat with GUI | Python Libraries: socket, threading, tkinter | Project Link

4

- Developed an advanced TCP group chat application with an intuitive Tkinter-based GUI.
- Implemented real-time communication between multiple users using socket programming and multithreading.
- Built a **private messaging system**, enabling users to send personal messages visible only to the intended recipient.
- Integrated **voting functionality** for collaborative decision-making within the group.
- Enhanced user management by incorporating **chat deletion**, **member removal**, and **chat history reloading** for comprehensive conversation views.

Technical Skills

Relevant Skills: API Development, Android SDK, Mobile Application Development, LINUX, Agile Methodologies.

Languages: C++, Python, Kotlin, JavaScript, HTML, CSS, SQL

Tools: Git, Jira, BitBucket, GitHub, Vercel, Dagger Hilt, Firebase (Cloud Messaging, Authentication, Storage), Latex

Databases: Firebase Realtime Database, Cloud Firestore, MySQL, MongoDB, RoomDB

Education

Netaji Subhas University of Technology

2020 - 2024

Bachelor of Technology in Information Technology (CGPA of 8.11)

New Delhi

Mount Carmel School (CBSE)

2016 - 2020

Class 12th - Percentage: 92.4%, Class 10th - Percentage: 88.6%

Dwarka, New Delhi

Achievements

- Solved 600+ Data Structures and Algorithm problems on platforms like Leetcode, GFG and coding ninjas.
- Achieved 5-star rating in Python programming and 4-star rating in problem-solving on HackerRank.
- Participated in over **50+ coding contests** and have a highest rating of **1503** on leetcode.