Raunak Kumar Singh

Software Engineer

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EDUCATION

Year	Degree/Certificate	Institute	CPI/%
2020 - Present	B.Tech in CSE	IIIT Kottayam	7.1/10
2019	Class XII (CBSE)	Modern School, Noida	75%
2017	Class X (CBSE)	Spring Dales Public School, Muzaffarnagar	10/10

SKILLS SUMMARY

- **Languages**:   C++, JavaScript, Basic Python
- **Frameworks**:   ReactJS, NextJS, NodeJS, ExpressJS, Web3, BootsTrap, Material UI
- **Tools**:   Docker, GIT & GITHUB, MySQL, MongoDB, Hardhat, Alchemy
- **Core Subject**:   Operating System, Object-Oriented Programming, DBMS, Blockchain

WORK EXPERIENCE

Project Engineer | C-DAC bengaluru   *March 2024-Present*
- Developed a quantum network simulator to simulate quantum circuit on GPUs.
- Optimized quantum circuit execution, resulting in a 20% improvement in qubit performance
- Researched advanced quantum technology and high-performance computing.

FACTS-H | Funded by Mozilla | link ⌘   *Jan 2024-March 2024*
- Developed a responsive website for Facts-H Lab with ReactJS
- Designed a modular, scalable architecture for easy maintenance.
- Automated deployment with Docker, GitHub, and Nginx, reducing deployment time on VPS.

KEY PROJECTS

DSA-SHEET ⓖ | MERN Stack | link ⌘   *June 2024*
- Created a DSA learning platform with secure **JWT authentication** and **OTP-based** password recovery.
- Enhanced performance with data caching, reduced API calls by 40
- **400+ real-time users** on the DSAsheet solve questions from this website.
- Tech Stack: **ReactJS, NodeJS, ExpressJS, MongoDB, POSTMAN, Bootstrap, Material UI**.

MT-MX Converter ⓖ| Microservices | Video ▶   *August-2022*   *Aug 2022*
- Develop **microservices** to validate, and convert old **MT103** payment receipts into **Pacs008** formats.
- Establish secure communication of REST API endpoints for receiving MT103, delivering Pacs008 format.
- Implemented microservices in docker container and hosted container on AWS.
- Tech Stack: **NodeJS, Regex, Docker, Nginx, AWS**.

CypherWallet ⓖ | NPM | NodeJS   *Jan 2023*
- Develop a Node.js script to creates and imports **BIP39 mnemonic** wallets, lists wallets, and retrieves Bitcoin balance and transactions and connect with blockchain test network using BlockCypher API.
- Implemented secure storage for Wallet Data using Sqlite3.
- Tech Stack: **NodeJS, ExpressJS, BIP39, Better-Sqlite3**.

ACHIEVEMENT

- Secured Runner-Up position at the Nest Digital **Microservices Hackathon** in Kakanad, Kochi.
- Secured the **3rd rank** in the coding contest held in College technical fest.
- Qualify two rounds in L&T technology services hackathon selected in **129 out of 3500+** students.
- **LeetCode** (400+ question) ⌘ | **Codeforces (1300+)** Pupil ⌘ | **Codechef (3*)** ⌘
- Elected Placement Coordinator at IIIT Kottayam.