# MOHIT SONI

Mathura, U.P. 281004

#### **EDUCATION**

### GL Bajaj Group of Institutions, Mathura, U.P.

**2021 - 2025** *Mathura, U.P.* 

BTech - Computer Science and Engineering - CGPA - 7+

• Data Structure and Algorithms (DSA) • Database Management System (DBMS) • Operating Systems

• C++

• Oops Concepts

### **EXPERIENCE**

## SDE Intern at DesiQnA

July 2023 - Nov 2023

- Developed and deployed a fully responsive frontend module for a key product section using React.js, TailwindCSS, and Node.js, improving user engagement by optimizing UI/UX flow.
- Implemented user verification and authentication workflows, tackling challenges like spam detection and bot activity mitigation through heuristic-based logic and validation layers.
- Integrated Google reCAPTCHA v2 for bot prevention, enhancing platform security and reducing fake signups/posts by over 80%.
- Collaborated cross-functionally to align UI design with backend APIs and PostgreSQL-based data models.
- Tech Stack: React.js, Node.js, TailwindCSS, HTML5, CSS3, PostgreSQL

#### **PROJECTS**

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- Engineered a resilient architecture leveraging WebSockets, Redis Pub/Sub, and Kafka; maintained sub-50ms latency for 99% of messages, ensuring seamless real-time communication across all application servers and clients..
- Designed and implemented a distributed real-time chat application capable of handling high-concurrency communication across multiple servers.
- Developed a modular monorepo with Turborepo to streamline interdependent frontend and backend development.
- Utilized Redis as a real-time message broker to overcome WebSocket's limitations on distributed servers, enabling seamless server-to-server communication.

# Notification System 🗗 ( Github | Express — Microservices — Redis — Kafka — Typescript — PostgreSQL

- Dynamic Consumer Scaling: Implemented Kafka consumer auto-scaling with partition rebalancing, ensuring consistent throughput and zero lag under high load.
- Failure Recovery and Dead Letter Queue: Designed an adaptive retry mechanism with exponential backoff, using Redis for transient failures and Kafka DLQ for non-retryable errors.
- Achieved 99.99% uptime with auto-healing consumers and failover handling.
- Developed a dynamic routing engine that prioritizes delivery based on user preferences.

# Personalize PDF ( | Github | Nextjs — Typescript — Pinecone — OpenAI — AWS S3 — Langchain 2025

- Developed a full-stack PDF personalization application using Next.js, React, and Typescript, reducing PDF processing time by 40%.
- Implemented OpenAI embeddings and Langchain for intelligent document processing, achieving 95% accuracy in content extraction.
- Utilized AWS S3 for scalable and secure file storage, **reducing storage costs by 30%**, and integrated Razorpay for subscription management, handling 100+ transactions per month.

#### TECHNICAL SKILLS

Languages: C, C++, JavaScript

Technologies/Frameworks: HTML5, CSS3, JavaScript, React, Nextjs, Tanstack Query, Typescript, Node, Express, Zustand, BullMQ, MaterialUI, MongoDB, PostgresQL, RESTApi, RabbitMQ, GraphQL, PrismaORM, Redis, WebSockets, Webhooks, Kafka, Docker, Linux, NGINX

**Developer Tools:** VS Code, Postman, Git and Github, Hoppscotch

CICD Tool: Github Actions

Cloud Computing Services: AWS S3, EC2, Cloudfront, Route 53, ECR, ECS

Cloud Platform: AWS