

MUHAMMAD USMAN BIN SOHAIL

Lahore, Pakistan

usman.sohail1212@gmail.com ◊ LinkedIn

SUMMARY

Full Stack Software Engineer with 3+ years of experience building and maintaining production-scale applications using React, Material UI (MUI), TypeScript, Python, Django, Django REST Framework (DRF), Node.js, GraphQL, REST APIs, and PostgreSQL. Skilled in end-to-end feature development, data modeling, API design, responsive UI development, and business logic implementation. Experienced in database performance optimization, Redis caching, asynchronous processing, algorithmic problem-solving, cloud services, and production debugging.

TECHNICAL SKILLS

Languages	JavaScript, TypeScript, Python
Frontend	React.js, Material UI (MUI), Tailwind CSS, Responsive UI Development
Backend & APIs	Django, Django REST Framework (DRF), Node.js, Express.js, NestJS, REST APIs, GraphQL, WebSockets, Swagger/OpenAPI
Databases & ORMs	PostgreSQL, MongoDB, MySQL, MS SQL, Redis, Django ORM, TypeORM, Prisma, Sequelize, Mongoose
Performance & Processing	Query Optimization, DataLoaders, N+1 Query Prevention, Caching, Graphile Worker, Job Queues, Background Processing
Algorithms & Data	Algorithmic Problem-Solving, Data Preprocessing, Feature Selection, Clustering, Forecasting
Cloud & DevOps	AWS, Amazon S3, Google Cloud Platform (GCP), Docker, Docker Compose, CI/CD
Security	JWT, Authentication, Authorization, Dependency Vulnerability Management, Vanta
Tools & Workflow	Visual Studio Code, Replit, Visual Studio, Postman, Git, GitLab, GitHub, Jira, Confluence, Agile/Scrum
Operating Systems	Linux, Ubuntu, macOS

EXPERIENCE

Revoech	06/2023 - Present
Senior Software Engineer	06/2024 - Present
- Contribute to end-to-end development of a large-scale US FinTech platform with over 1M lines of production code, delivering features, enhancements, and production fixes. - Develop and integrate GraphQL and REST APIs, implementing backend business logic and connecting frontend interfaces with backend services. - Optimize GraphQL performance using DataLoaders to reduce redundant database queries and mitigate the N+1 query problem, improving response times for data-heavy operations. - Work with PostgreSQL, TypeORM, Redis, Graphile Worker, and background job queues to improve data access, caching, and asynchronous processing. - Troubleshoot production issues using Google Cloud logs, implement secure document uploads with AWS S3, and resolve dependency vulnerabilities through Vanta.	
Software Engineer	06/2023 - 05/2024

- Developed full-stack features for international clients across multiple industries, contributing to application development and ongoing enhancements.
- Built responsive user interfaces using React, TypeScript, and Material UI (MUI), focusing on reusable components and maintainable frontend code.
- Developed backend services and REST APIs using Python, Django, Django REST Framework, Node.js, and NestJS.
- Worked with relational databases, API integrations, and application debugging to deliver reliable features and resolve functional issues.

PROJECTS

UniPal - University Community Platform

- Developed a full-stack university platform enabling students to review courses and professors, donate or request books, and share academic resources.
- Built interactive user interfaces using React.js and developed backend APIs using Node.js and Express.js, with MongoDB for data persistence.
- Implemented core features for academic reviews, book exchanges, and study material sharing.

FlowBoard - Multi-Tenant Project Management SaaS

React, TypeScript, NestJS, PostgreSQL, Redis

- Developed a full-stack project management platform supporting organizations, teams, projects, tasks, and role-based access control, with a PostgreSQL data model designed for organization-level data isolation.
- Implemented REST APIs, JWT-based authentication, and WebSocket-powered real-time updates for collaborative task management.
- Built a responsive React dashboard with Kanban boards and team collaboration features, using Redis and Graphile Worker for background jobs and AWS S3 for file uploads.

Secure File Sharing with Zero-Knowledge Proofs

JavaScript, Python, Cryptography

- Designed a secure file-sharing system using Zero-Knowledge Proofs and user-managed public key encryption.
- Implemented confidentiality and authentication mechanisms without revealing sensitive information.

Preprocessing and Data Visualization

Python, Google Colab

- Performed data preprocessing, feature selection, clustering, and visualization using Python.
- Implemented and evaluated energy consumption forecasting models.

EDUCATION

FAST National University of Computer and Emerging Sciences (FAST NUCES)

Bachelor of Science in Computer Science (BS CS)

Lahore, Pakistan