Syed Muhammad Irtaza

irtaza780@gmail.com | +1 (263) 355-2859 | Github: irtaza780 | LinkedIn: Irtaza Syed
Portfolio: Irtaza

OBJECTIVE

Software Engineer with hands-on experience in full-stack development using the **MERN stack**, **NestJS**, and **Next.js**. Proficient in both **SQL (MySQL, PostgreSQL)** and NoSQL (MongoDB) databases. Seeking opportunities to solve complex engineering problems, contribute to scalable products, and grow in a collaborative, fast-paced environment.

WORK EXPERIENCE

Full-Stack Developer   **May 2024 – Present**
Ideamappers   *Remote, PK*
- Implemented dynamic filters on a **2M+ user PostgreSQL dataset**, calculating influencer fee averages based on date range and content type using **B-Tree indexes**, enhancing query performance.
- Developed **"Quick Payment"** flow enabling direct payments to creators, bypassing traditional application steps and improving conversion rates.
- Optimized a slow-performing API by refactoring Sequelize queries to raw SQL, reducing DB response time by **40%**.
- Led white-labelling effort for client portal, enabling dynamic theming and brand-specific customization.

MERN Stack Developer   **Sept 2022 – Mar 2024**
Codistan Ventures   *Islamabad, PK*
- Developed and deployed a website using **Shopify Headless CMS**, integrating a custom front-end with Shopify APIs.
- Engineered a peer-to-peer property platform using **MongoDB ACID transactions**, supporting thousands of safe concurrent trades.
- Utilized **GitLab CI/CD** pipelines to reduce deployment time by **20%** and improve release cycles.
- Implemented **SWC bundler** to replace Webpack, significantly boosting build performance.

PROJECTS

Habily - Nest.js, Next.js, Tailwind, PostgreSQL, ScrapingBee, Flowise
- Revamped data scraping logic using **ScrapingBee**, adding fallbacks to ensure availability and reliability of rental listings.
- Created advanced filters for property search (price, size, type, etc.), enabling targeted user experiences.
- Optimized query performance by redesigning price maps and reducing redundant scraping operations.
- Built **Flowise AI agents** that generate contextual reports from property URLs.

Lua - Next.js, Tailwind, PostgreSQL, Monorepo, Node.js
- Cut S3 storage costs by **50%** by redesigning the media architecture: segmented media into prod/staging/dev buckets, enabled versioning and lifecycle rules for automated cleanup, activated access logging to analyze usage patterns, and adopted Intelligent-Tiering for infrequently accessed assets.
- Refactored monolithic APIs into modular endpoints, replacing Sequelize with raw queries to reduce query time from **6 seconds** to **1.2 seconds**.
- Revamped portal UI and filters for better UX and performance; added debounce + cancellation for rapid API calls.
- Introduced a dynamic **Quick Payment** feature allowing direct payments to creators reducing time to pay creators by **10%**

PartOwn - Next.js, GraphQL, Node.js, Tailwind, MongoDB, Mailchimp, Docker
- Implemented MongoDB transactions for high-concurrency trading features, reducing failures by **5%**.
- Improved navigation latency by **25%** using preloading and prefetching techniques in Next.js.
- Reduced page load time by **30%** using lazy loading, dynamic imports, and code splitting.
- Audited and removed heavy libraries, reducing bundle size by **15%**.

BizB - Next.js, MongoDB, GraphQL, AWS S3, GCP, Tailwind, Mailchimp
- Migrated project from Webpack to **SWC** and upgraded to **Next.js 13**, improving build speed by **120%**.
- Used MongoDB transactions to fix cart syncing issues, reducing abandoned carts by **15%**.
- Implemented **Next.js Image Optimization API** to reduce load times by **50%**.
- Refactored codebase to TypeScript, improving maintainability and early bug detection.

GemMint - Node.js, Express, MySQL, AWS S3, Stripe, PayPal, Venmo
- Integrated **Venmo**, **PayPal**, and eventually **Stripe** for seamless in-app payment processing.
- Built dynamic membership plans with full CRUD support to enable flexible loyalty rewards management.
- Migrated all legacy media files to **AWS S3** and developed scripts for batch uploading and access control.
- Collaborated with frontend team to troubleshoot performance issues and improve API response times.

Gifted - Node.js, MySQL, Stripe, Tremendous API
- Integrated the **Tremendous API** to enable distribution of gift cards from various vendors.
- Developed social networking features including **friend suggestions**, requests, and mutual contacts.
- Implemented secure **Stripe payment processing** for gift transactions.
- Optimized backend with **pagination and query tuning**; maintained full technical documentation.

ACADEMIC PROJECTS

Fake News Detector - Python, LSTM, Random Forest, Kaggle, PolitiFact, Twitter API
- Combined datasets from **Kaggle** and **PolitiFact** and trained classifiers (LSTM, Random Forest) to evaluate the truthfulness of news text.
- Developed a bot detection module using Twitter metadata to evaluate the **credibility of the source account**.

Hospital Management System - Java, MySQL, JavaMail API
- Built a desktop application using **Java and MySQL** to manage patients, staff, medicines, and medical history.
- Automated expiry alerts using scheduled email jobs, enhancing **inventory management efficiency**.

EDUCATION

Concordia University   **2025**
MEng Software Engineering   *Montreal, QC, Canada*
COMSATS University Islamabad, Wah Campus   **2021**
B.S in Software Engineering   *Wah Cantt, PK*

TECHNICAL SKILLS

Programming Languages: JavaScript, Python, C++, Java
Technologies: React.js, Next.js, Node.js, NestJS, Mailchimp, Material UI, Bootstrap, Tailwind, MySQL, PostgreSQL, MongoDB
Infrastructure: Docker, AWS (EC2, Amplify, Elastic Beanstalk, Code Pipeline, S3 Bucket, Git, GitLab CI/CD, WSL2