

# Muhammad Mohsin

## Senior Software Engineer

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## Profile

Muhammad Mohsin is a highly skilled Senior JavaScript Developer with over 5 years of experience in full-stack development. He specializes in TypeScript, React, Next.js, and event-driven architectures. Mohsin has a proven track record of developing scalable, client-facing applications and integrating AI features to enhance user experience. With expertise in PostgreSQL, AWS, and modern JavaScript frameworks, he thrives in collaborative and dynamic environments. He is driven by curiosity and innovation, continuously pushing the boundaries of technology to deliver exceptional results.

## Education

### MS Computer Science

Blekinge Institute of Technology

Karlskrona, Sweden

2022 - ongoing

Machine Learning, Deep Learning, Big Data, Research Methodologies, Information Retrieval.

### BS Computer Science

University of Gujrat

### Gujrat, Pakistan

2016 - 2020

Programming Fundamentals, Data Structures, Algorithms, Artificial Intelligence, Networking, Databases.

## Professional Experience

### Full Stack Engineer

Dosell AB

Stockholm, Sweden

Dec 2022 - Present

- Spearheaded Cloud OCR automation to eliminate manual alarm processing bottlenecks at ICE Malaga. Built Django backend with Celery parallel processing and AWS infrastructure (ECS, ECR, ALB, VPC) including auto-calling mechanism. Reduced manual intervention by 80%, cut recurring costs, and improved response times by 60%.
- Led development of Dosell's first hybrid application (iOS/Android/Web) to address procurement and customer management gaps. Delivered Flutter-based solution with secure API integrations within 2-month deadline. Enabled Finnish deal of 500-1000 units and secured 1M SEK ARR milestone.
- Architected scalable React.js and Next.js medical applications to resolve performance bottlenecks. Implemented optimization strategies, code splitting, and responsive design patterns. Improved load times by 40% and achieved 99.9% uptime for critical workflows.
- Designed microservices architecture using NestJS, PostgreSQL, and event-driven patterns to streamline backend operations. Replaced legacy systems causing data processing bottlenecks. Increased throughput by 3x and reduced latency from 2000ms to 300ms.
- Collaborated with AI teams to integrate ML models for automated prescription management and inventory tracking. Implemented Python APIs and real-time data pipelines to accelerate product development. Reduced manual processing by 70% and improved inventory accuracy to 95%.
- Mentored 5 junior developers through code reviews, architecture guidance, and technical workshops on React, Node.js, and cloud deployment. Established sustainable knowledge sharing culture and development best practices. All mentees promoted within 12 months, improved code quality by 50%.

### Software Engineer

Matrix Network International B.V.

Remote

April 2020 - Nov 2022

- Developed scalable web applications using Next.js and integrated APIs for financial automation workflows.
- Designed and implemented real-time event-driven solutions using RabbitMQ and Kafka.

- Collaborated with AI engineering teams to discover and deliver innovative client-focused features.
- Built and optimized PostgreSQL-backed microservices for high-volume transaction processing.

## Projects

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### Backend and Hardware Developer

#### *Bitcoin ATM Machine*

- Developed a Bitcoin ATM allowing users to buy bitcoin using cash or debit card at various locations.
- Designed and integrated hardware components with web APIs, developing a complete backend.
- Implemented microservices architecture using AWS SQS for service communication.
- Integrated the backend with Bitcoin Main-net and lightning wallets for seamless transactions.

### Full Stack Developer

#### *Venrecarga*

- Developed a mobile recharge service for Venezuela integrated with BunQ Bank, Stripe, PayPal, and OpenNode.
- Provided continuous support and implemented new feature requirements.

### Backend Developer

#### *Rembit*

- Developed a remittance service to send funds instantly over Master and Visa networks.
- Implemented secure endpoints for KYC compliance and anti-money laundering checks.
- Designed an ETL pipeline to transform and load data from S3 to MySQL using Athena every 24 hours.

### Microservices and Frontend Developer

#### *Chivozon*

- Created a WordPress plugin to synchronize WooCommerce stores for inventory and automated order processing.
- Developed a microservice, Ordering service, using Restful APIs, Sockets, and RabbitMQ for backend communication.
- Built frontend modules in Next.js and an admin dashboard in React.js.
- Configured RabbitMQ for production, including queues and exchanges setup.

## Skills

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- **JavaScript:** React.js, Next.js, Nest.js, TypeScript, NodeJs, Express.js, Flutter
- **AWS:** Athena, DynamoDB, S3, EC2, Lambda, CloudWatch, CodeCommit, CloudFront, Simple Queue Service (SQS), RDS, Terraforms
- **System Design:** Microservices, Kafka, RabbitMQ, Elasticsearch/OpenSearch, Real-time event driven Applications, Design Patterns(Singleton, Factory, SOLID, Dependency Injection)
- **Databases:** SQL (PostgreSQL, MySQL, SQL Server, Oracle DB), NoSQL (MongoDB, DynamoDB, Firestore)
- **DevOps Skills:** Linux, Docker, Jenkins, CI/CD, Git, Gitlab, SVN
- **Hardware Skills:** Arduino (ESP32, 8266), Raspberry Pi, MDB, Vending machines, Bill & coin acceptors and validators, Touch & paper screens, Serial communication
- **Soft Skills:** Leadership, Professional Communication, Humble Attitude, Team Management, Time Management

## Achievements

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- Java Master Trainer by Oracle certified
- Java Foundations certified by Oracle
- MS Office Suit certified by Microsoft