

# KHAWAJA MUHAMMAD MUSHOOD

Software Engineer

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## Summary

Accomplished software engineer with experience in full-stack development using React, React Native, Node.js, and Nest.js. Proven success in delivering scalable web and mobile applications, optimizing API performance by 30%, and ensuring security and compliance with JWT authentication and HIPAA standards. Skilled in database design with Prisma and PostgreSQL, as well as deploying production-ready solutions on AWS. Dedicated to driving innovation and efficiency through robust coding practices and automation in CI/CD.

## Experience

Texagon	Lahore, Pakistan
Software Engineer	08/2025 - Present
<ul style="list-style-type: none"><li>Developed Full-Stack web applications using react (frontend) and node.js with nest.js (backend).</li><li>Implemented RESTful APIs improving data retrieval speed by 30% using Redis cache</li><li>Successfully delivered 2 projects on time by collaborating with cross-functional teams.</li><li>Optimized front-end code, enhancing user experience and reducing load times by 5%</li><li>Integrated Supabase services, increasing app reliability and scalability by 10%</li></ul>	
CodetoKloud	Lahore, Pakistan
Associate Web Developer	04/2025 - 08/2025
<ul style="list-style-type: none"><li>Developed full-stack web applications using React and Node.js with Express, implementing jwt-based authentication to secure user sessions.</li><li>Utilized PostgreSQL and Prisma ORM to design efficient, scalable database models while ensuring HIPAA compliance with secure coding practices.</li><li>Built a RESTful API architecture on the frontend using Redux Toolkit, implementing smart caching strategies to enhance application performance.</li><li>Created a React Native mobile app from scratch, integrating JWT for authentication, and using Context API for global state management.</li><li>Implemented a scalable Axios setup for token refreshing and centralized error handling, providing a consistent API structure.</li></ul>	
Arbisoft	Lahore, Pakistan
Software Engineer Intern	07/2024 - 09/2024
<ul style="list-style-type: none"><li>Implemented and integrated mapping solutions within mobile applications.</li><li>Developed authentication mechanisms to secure user access.</li><li>Configured and managed push notification services.</li><li>Engaged in database management, query optimization, and interaction using Firebase Realtime Database.</li><li>Applied state management principles utilizing Redux and Redux Toolkit.</li><li>Conducted snapshot and unit testing to ensure code quality and reliability using Jest.</li><li>Utilized Git and GitHub for version control and collaborative development.</li><li>Automated build processes and continuous integration using CircleCI.</li><li>Managed side effects in applications using Redux Sagas.</li><li>Utilized Context API to manage and share state across the component tree without prop drilling.</li><li>Designed and implemented dynamic styles and themes using Styled Components.</li><li>Developed and integrated animations to enhance user experience.</li><li>Utilized package managers such as npm and Yarn for dependency management.</li><li>Established automated workflows to streamline development processes.</li></ul>	

## Key Achievements

 <b>Cloud Deployment and Database Management</b> Deployed production-ready solutions on <b>AWS</b> , utilizing services like AWS EC2 with Nginx and PM2, and AWS RDS for PostgreSQL.	 <b>Enhanced App Performance</b> Increased app performance by 25% using intelligent caching strategies with Redux Toolkit.	 <b>Maintained HIPAA Compliance</b> Developed secure web applications, ensuring HIPAA compliance for 100% of projects.
 <b>Streamlined Deployment Process</b> Automated workflows, reducing deployment time by 60% with CircleCI integration.	 <b>Template Development Impact</b> Built Express.js template, reducing setup by 60% using pre-configured schemas.	 <b>API Performance Boost</b> Improved data retrieval speed by 30% implementing RESTful APIs and Redis caching.

## Education

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University of Management and Technology - UMT  
Bachelor of Science - BS, Computer Science

01/2021 - 12/2025

## Certification

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Supervised Machine Learning: Regression and Classification — Coursera

Software Engineer — Hacker Rank

Frontend Developer React — Hacker Rank

SQL Basic — Hacker Rank

Python Basic — Hacker Rank

CSS Basic — Hacker Rank

## Projects

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### Central Board Wellness Center

CodetoKloud

<https://centerboardwellnesscenter.com/>

04/2025 - 08/2025

Worked with a US-based client to build a secure and scalable web application using React and Express. Implemented advanced security features, optimized API performance, and deployed the full stack on AWS with a production-ready architecture.

- Developed the frontend using React with Material UI and Tailwind CSS for fast, consistent UI development.
- Built a secure Express.js backend with rate-limiting, token-based authentication, and protected API endpoints.
- Used Prisma ORM with PostgreSQL, hosted on AWS RDS, for reliable and optimized database operations.
- Deployed the full application on AWS EC2 using Nginx as a reverse proxy and PM2 for process management.
- Implemented RTK Query on the frontend to enable efficient caching, reduce API calls, and improve overall user experience.

### Admin Central Board Wellness Center

CodetoKloud

<https://admin.centerboardwellnesscenter.com/>

04/2025 - 08/2025

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### Express-Backend-Template

This open-source project standardizes project setup.

- Developed a reusable Express.js backend template to streamline the creation of robust, scalable REST APIs.
- Standardized project setup with pre-configured linters, a modular folder structure, and a unified response utility to ensure consistent API output across endpoints.
- Integrated JWT-based authentication for secure user management.
- Created a mail-sending utility for seamless email integration.
- Utilized Prisma ORM for effortless connectivity to relational databases such as PostgreSQL, MySQL, and SQLite.
- Automated setup tasks with Prisma schemas and database connections, reducing development time by 60%.
- Designed with flexibility in mind to support customization for diverse project requirements while adhering to modern security and coding standards.