

# Muhammad Ali

Full Stack Product Engineer

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## PROFESSIONAL SUMMARY

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Full Stack Product Engineer with 3+ years of experience building enterprise-grade applications and cloud infrastructure. Specialized in AWS cloud automation, MERN stack development, and AI-powered solutions. Proven track record of delivering measurable business impact: 75% faster deployments, 38% cost reduction, and 99.9% system uptime. Expert in bridging technical implementation with business requirements.

## TECHNICAL SKILLS

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**Frontend:** React.js, Next.js, TypeScript, JavaScript ES6+, Tailwind CSS, Material-UI, shadcn/ui, Electron, Redux Toolkit

**Backend:** Node.js, Express.js, FastAPI, Go, RESTful APIs, GraphQL, MongoDB, PostgreSQL, Firebase

**Cloud & DevOps:** AWS (EC2, S3, CloudFormation, IAM, Launch Templates), Docker, CI/CD, GitHub Actions, Linux Administration

**AI & Integration:** Google Gemini, OpenAI, Google Genkit, RAG (Retrieval-Augmented Generation), spaCy NLP

**Languages:** TypeScript, JavaScript, Python, Go, Dart

**Security:** JWT Authentication, RBAC, AES256 Encryption, DRM Protection, IAM Policies

## PROFESSIONAL EXPERIENCE

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### Contract Software Engineer

September 2024 - Present

#### Remote

*Building secure digital publishing infrastructure with automated AWS deployment*

- Achieved 75% faster builds by optimizing pipeline from 2 hours to 30 minutes using Node.js and EC2 orchestration
- Reduced infrastructure costs by 38% through engineered spot instance fallback strategy for build servers
- Architected 3-tier build pipeline using AWS CloudFormation and Launch Templates enabling one-click deployments
- Implemented enterprise security with DRM protection, AES256 encryption, and comprehensive IAM policies
- Developed cross-platform Electron desktop application with React and TypeScript for secure content delivery

**Technologies:** AWS EC2, S3, CloudFormation, IAM, Node.js, Electron, React, TypeScript, Docker

### Software Engineer

January 2023 - February 2025

#### Bella Egypt

*Led complete digital transformation from manual workflows to automated systems*

- Built enterprise ERP/CRM system from scratch using MERN stack, replacing legacy spreadsheet workflows for inventory, sales, and HR
- Engineered RAG-powered AI customer support agent using Google Genkit, automating lead qualification and reducing response times

- Created real-time business analytics dashboard with Firebase providing financial insights and reporting
- Maintained critical RESTful APIs serving production data with 99.9% uptime
- Managed end-to-end SDLC as sole engineer, translating business requirements into technical solutions

**Technologies:** MongoDB, Express, React, Node.js, Next.js, Firebase, Google Genkit, TypeScript

## KEY PROJECTS

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### CV-lize - AI Resume Optimization Platform

2024

- Production SaaS application with AI-powered resume analysis and ATS compatibility scoring (95%+ accuracy)
- Multi-format upload support (PDF/Markdown/Text) with advanced security validation and malware detection
- Professional PDF generation with customizable templates and real-time preview
- **Tech Stack:** React, FastAPI, MongoDB, Google Gemini, spaCy, TypeScript
- **Live Demo:** cv-lize.vercel.app

### MERIDIEN - Multi-Tenant Enterprise System

2024

- Enterprise-grade retail and inventory management platform with multi-tenant architecture
- Cross-platform mobile applications using Flutter for iOS and Android
- RESTful API design with role-based access control and JWT authentication
- **Tech Stack:** Go, Flutter, PostgreSQL, JWT

### SwiftCart Ecosystem - E-Commerce Platform

2023-2024

- Full-featured e-commerce solution with customer frontend and comprehensive admin dashboard
- Real-time inventory management, secure authentication with RBAC, and integrated payment processing
- Sales analytics and reporting with data visualizations
- **Tech Stack:** React, TypeScript, Firebase, Vite, shadcn/ui, Recharts

### OmniAssistant - AI Chatbot Platform

2024

- AI-powered conversational chatbot with RAG-based knowledge retrieval for automated customer support
- Lead qualification automation and admin dashboard for conversation management
- **Tech Stack:** Next.js, Google Genkit, Google Gemini, TypeScript

## EDUCATION

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### B.Sc. Computer & Control Systems Engineering

2022

Suez Canal University

*Thesis: Malware Detection Based on Static & Dynamic Features (Focus on System Security & Low-level Analysis)*

## CERTIFICATIONS & ACHIEVEMENTS

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- Achieved 75% performance improvement in build pipeline optimization
- Reduced cloud infrastructure costs by 38% through architectural improvements
- Maintained 99.9% uptime for critical production systems
- Open source contributor with multiple production-ready applications