

Objective

Software Engineer with 3 years of experience in full-stack development, cloud-native technologies, and DevOps. Proficient in building scalable applications using **MERN stack**, containerizing with **Docker and Kubernetes**, and optimizing **AWS** infrastructure. Passionate about **distributed systems** and **high-performance backends**. Leverage **AI-assisted tools** to accelerate development workflows.

Experience

Software Engineer at EliteITTeam, Manchester (UK) (Remote) *Sept 2024 - Present*

- Led end-to-end lifecycle of scalable systems, from design to **containerized deployment** and production maintenance.
- Architected and maintained **CI/CD pipelines** using **GitHub Actions**, reducing deployment time by **40-50%** through bottleneck identification and optimization.
- Optimized **Docker images** for performance and cost, achieving **30%+ reduction** in image size & build times.
- Conducted comprehensive **AWS resource analysis** and implemented optimization strategies, resulting in measurable **cost reduction**.

Associate Software Engineer at EliteITTeam, Manchester (UK) (Remote) *Sept 2023 - Sept 2024*

- Developed web applications for company products and client projects, focusing on **feature implementation** and **backend APIs**.
- Gained foundational experience in **DevOps practices** by containerizing applications with Docker under senior guidance.
- Contributed to deployment processes and participated in code reviews to ensure quality standards.

Projects

GoQueue: Distributed Message Queue *Golang, Docker, Kubernetes*

Built a **hybrid message queue** solving Kafka's stop-the-world rebalancing and SQS's lack of replay — combining durability with per-message acknowledgment.

- Implemented **append-only log storage** with offset-based replay and timestamp indexing for point-in-time recovery.
- Architected custom **coordination layer** for leader election and cluster metadata management across nodes.
- Developed **hierarchical timing wheel** for **O(1)** delayed messaging and cooperative incremental rebalancing.
- Engineered **priority lanes** for QoS guarantees and built **intrinsic message tracing** without external dependencies.

GoGate: High-Performance L4/L7 Proxy *Golang, TCP/IP, HTTP*

Developed a production-ready **API Gateway** and **Load Balancer** handling **10k+** concurrent connections.

- Implemented **Weighted Round-Robin** and **Least-Connections** algorithms with **token-bucket rate limiting**.
- Built custom **3-state Circuit Breaker** pattern with configurable thresholds and **active health checks** (TCP/HTTP).
- Engineered **dual-layer proxying**: raw TCP for L4 performance and full HTTP middleware chain for L7 routing.
- Deployed with **Kubernetes Helm charts**, **Prometheus metrics**, and **Grafana dashboards** for observability.

Dynamic Widget Injection System *NestJS, React, GTM API*

Engineered an **Ad Management Solution** with **Google Tag Manager API** integration and custom dashboard.

- Automated Tag and Trigger creation via **GTM API** for streamlined ad deployment across multiple sites.
- Developed **dynamic widget positioning** with responsive design and **UTM tracking** for campaign analytics.
- Built **real-time analytics dashboard** for performance monitoring and campaign management.

Kyverno to Rego Policy Translator *Golang, OPA, Kubernetes*

- Created a tool to transpile **Kyverno (YAML)** security policies into **OPA Rego**, enabling policy engine interoperability.

Skills

- **DevOps & Cloud:** Docker, Kubernetes, AWS, GCP, CI/CD (GitHub Actions), Terraform, Nginx
- **Backend:** NestJS, Express.js, Flask, FastAPI, tRPC, MongoDB, PostgreSQL, Redis, gRPC
- **Frontend:** React.js, Next.js, Redux, React Query, Tailwind CSS, Component Libraries
- **Programming Languages:** Golang, Python, JavaScript, TypeScript, SQL
- **Systems & Performance:** Distributed Systems, Message Queues, Scalable System Designing
- **AI-Assisted Development:** GitHub Copilot, Custom AI Agents, Context-Aware Prompt Engineering,

Education

Bachelors of Science in Computer Science *National University of Sciences and Technology, Islamabad*

Certifications

- AWS Certified Solutions Architect – Associate (Issued: July 2025)