

MIRZA BILAL ALI BAIG

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PROFESSIONAL SUMMARY

Full Stack Engineer with deep expertise in TypeScript, Next.js, React.js, React Native, and Python, with a production track record designing agentic AI systems, multi-agent orchestration, and RAG pipelines at enterprise scale. Embedded onsite within Fortune 500 engineering teams in the United States, shipping full stack applications and AI-powered systems serving 50,000+ concurrent users. Deploys Claude Code and LLM-assisted development workflows to accelerate delivery velocity and maintain engineering quality. Built and delivered LangChain and LangGraph-based agentic pipelines that saved 120+ hours monthly and transformed enterprise knowledge workflows across 5 business units.

TECHNICAL SKILLS

Web Frontend: TypeScript, Next.js, React.js, Vue.js, JavaScript (ES6+), Tailwind CSS, Redux, Zustand, React Query, Webpack, Vite, PWA, Responsive Design, Cross-Browser Compatibility

Mobile Development: React Native, Expo, Metro Bundler, React Navigation, Xcode, Android Studio, AVFoundation (iOS), ExoPlayer (Android), push notifications (FCM, APNs)

Architecture: Micro-Frontend Architecture, Module Federation (Webpack 5), Monorepo (Nx), distributed systems, event-driven architecture, System Design, high availability, scalability

AI and Agentic Systems: LangChain, LangGraph, LlamaIndex, CrewAI, AutoGen, Agent Orchestration, Multi-Agent Systems, Tool Use, Embeddings, Pinecone, RAG Pipelines, LangSmith, prompt engineering

AI Development Tools: Claude Code, GitHub Copilot, Cursor, agentic coding, LLM-assisted development

Backend and Cloud: Node.js, Express.js, Python, REST APIs, GraphQL (Apollo), microservices, Agora SDK, WebRTC, WebSockets, AWS (Lambda, S3, EC2), Docker, Kubernetes, CI/CD, Git

Databases: PostgreSQL, MongoDB, MySQL, Redis, schema design, query optimization, indexing, migrations, performance tuning

Testing and Quality: Jest, React Testing Library, Playwright, TDD, unit testing, integration testing, security review, observability, code quality

Leadership: technical mentorship, engineering standards, cross-functional collaboration, Agile/Scrum, sprint planning, code reviews, technical roadmaps, stakeholder communication

PROFESSIONAL EXPERIENCE

Full Stack Engineer

Apr 2026 - Present

Creative Creations | Remote

Stack: React Native, Expo, TypeScript, Node.js, Express.js, Agora SDK, WebRTC, Redis, MongoDB, Xcode, Android Studio, Docker, GitHub Actions

- Architected the full stack of a cross-platform live streaming platform for iOS and Android using React Native and Expo, designing the real-time video layer with AVFoundation and ExoPlayer native modules, a Node.js and Express.js WebRTC signaling server, and Agora SDK integration enabling sub-second live video delivery to concurrent viewers at scale.
- Designed and shipped real-time audience engagement features including live video broadcasting, chat, viewer count synchronization, and push notifications using Agora SDK and Redis pub/sub, maintaining consistent sub-100ms message delivery across simultaneous iOS and Android sessions.
- Defined engineering standards, Git branching strategy, code review protocols, sprint cadence, and CI/CD pipelines for a 4-person team, achieving zero defect escapes across all production releases and cutting delivery cycle time by establishing structured sprint-to-release workflows.

Software Engineer II

Apr 2020 - Mar 2026

Nisum USA | Onsite, United States

Stack: TypeScript, Next.js, React.js, Node.js, Express.js, Python, GraphQL, PostgreSQL, MongoDB, LangChain, LangGraph, Azure OpenAI, Pinecone, AWS (Lambda, S3, EC2), Docker, Kubernetes, Jest, React Testing Library

- Embedded onsite within Fortune 500 client engineering teams in the United States, architecting and shipping TypeScript and Next.js micro-frontend modules via Module Federation alongside Python and Node.js backend services on AWS, shipping product surfaces handling over 50,000 concurrent users with zero performance degradation across every production release.
- Designed and deployed production agentic AI systems using LangChain and LangGraph, implementing multi-agent orchestration with tool use, state management, and human-in-the-loop validation flows backed by Azure OpenAI and Pinecone vector embeddings, eliminating 90% of manual document processing for 200+ enterprise users across 5 business units and improving retrieval relevance by 30%.
- Reduced API response latency by 40% by profiling and optimizing RESTful and GraphQL services in Node.js and Python with targeted PostgreSQL and MongoDB query indexing, connection pooling, and payload compression, sustaining SLA targets under peak concurrent load.
- Drove team capability by mentoring 4 engineers through structured code reviews, architectural coaching, and pair programming, reducing onboarding from 5 weeks to 2 weeks and measurably raising PR quality and test coverage across the engineering team.

Senior Software Engineer

Jul 2019 - Apr 2020

Cubix | Karachi, Pakistan

Stack: TypeScript, Next.js, React.js, Node.js, Express.js, PostgreSQL, Redis, GitHub Actions, Jest, React Testing Library

- Designed and shipped full stack web applications with TypeScript and Next.js frontends and Node.js backend APIs, delivering features 30% faster than projected by defining component architecture standards, clear ownership boundaries, and a CI/CD pipeline that sustained zero deployment errors across 10+ major releases.
- Drove a 40% reduction in page load time and measurable Core Web Vitals improvements across all supported browsers by implementing Redis caching, code splitting, lazy loading, and CDN optimization on the Next.js stack.

EDUCATION

Bachelor of Science, Computer Science | PAF Karachi Institute of Economics and Technology (KIET), Pakistan

CERTIFICATIONS

- Claude Code in Action, Anthropic (2026)
- Building Generative AI Skills for Developers, LinkedIn Learning (2024)
- AWS Development Tools (CodePipeline, CodeCommit, CodeBuild), Amazon Web Services (2020)