

Muhammad Hammad Ahmad

Senior Software Engineer (Full Stack · AI Applications)

Lahore, Pakistan · +92 324 4112700 · hammad.shahid120@gmail.com · linkedin.com/in/hammad-ahmad-0139bb162 · github.com/hammadahmad120

SUMMARY

Senior full-stack engineer with **7+ years** building production AI applications (RAG, hybrid search, guardrails, LLM evaluation) and scalable web platforms using TypeScript, React/Next.js and Node.js/NestJS. Creator of **InstantBot**, a multi-tenant AI knowledge-assistant SaaS piloted with an HR team. **Led a team of 4 engineers**, owned services end to end, and currently extending into AI agents, tool calling and MCP.

KEY IMPACT METRICS

7+ Years in production Full-stack, web platforms to AI products	4M+ Production users, single platform Lebara telecom · 5 countries (DE, UK, NL, DK, FR)	4 Revenue-generating products Lebara, Educative, Aqari, Zerodocs · millions in monthly transactions combined	2 AI products created and built InstantBot Knowledge Assistant and Document Scout · validated internally at Nextbridge
--	--	---	---

TECHNICAL SKILLS

- AI / LLM:** Retrieval-Augmented Generation (RAG), hybrid search, vector databases (pgvector), embeddings, reranking, context and prompt engineering, LLM integration (Gemini, Groq APIs), grounding and guardrails, LLM evaluation, structured outputs, AI-assisted development (Cursor, Claude Code, MCP)
- Frontend:** React, Next.js (App Router), TypeScript, Redux Toolkit, Material UI, react-hook-form, next-intl, Google Analytics 4
- Backend & Data:** Node.js, NestJS, Express, GraphQL, REST, PostgreSQL, MongoDB, Redis, TypeORM, Sequelize, Supabase, Python
- Tools & Practices:** Jest, Docker, Jenkins, Git, Jira, Figma, Swagger, Azure App Insights, AWS S3, Stripe, Adyen, microservices

AI PRODUCT

InstantBot — AI Knowledge Assistant & Document Intelligence SaaS *Creator* Mar 2026 – Present

Multi-tenant SaaS that turns a company's documents into a grounded, citation-backed AI assistant (web, widget, WhatsApp), with Document Scout for LLM-driven document screening and ranking. **Piloted with an HR team** to screen CVs against job requirements.

- Architected an end-to-end **RAG** platform: document ingestion (parsing, OCR, chunking), pgvector embeddings and hybrid retrieval with reranking
- Engineered grounding and guardrails (evidence scoring, tiered prompts, refusal handling, fallbacks) that prevent hallucinations and cut cost
- Built Document Scout: LLM-driven requirement and field extraction with source-quoted verification and explainable ranked shortlists
- Delivered streaming web chat, embeddable widget and WhatsApp Business channels on secure multi-tenancy (RLS, rate limits, quotas)
- Established an **LLM evaluation** framework (recall, MRR, hit@k, latency) with human-in-the-loop analytics to improve answers

Tech: Node.js, TypeScript, Express, Next.js, Supabase (PostgreSQL, pgvector), Python, Gemini API, Groq API, WhatsApp Business API

PROFESSIONAL EXPERIENCE

Nextbridge FZE — Senior Software Engineer (Contract) Oct 2024 – Present

Aqari — ADRES Sharjah real-estate digital services portal | Next.js 14, React 18, TypeScript, Redux Toolkit, Material UI, GA4

- Lead frontend engineer for a **government portal with 29 real-estate workflows** (web plus ADRES iOS/Android apps): production support, enhancements and feature delivery in a 200k+ line Next.js/TypeScript codebase
- Took over the iOS and Android apps after the mobile team was dissolved; built the typed web-to-native webview bridge (navigation, downloads, platform detection) and manage native releases
- Designed a GA4 analytics layer, hardened the shared API client (token refresh, SSO re-auth, error mapping), enforced pixel-perfect UI via a shared component library and built an AI-assisted code generation workflow with Jira and Figma

Confiz — Senior Software Engineer *Lahore* Feb 2023 – Sep 2024

Lebara — telecom platform | React, Redux, GraphQL, Node.js, TypeScript, AEM, Adyen, Jest

- Built full-stack features from scratch, integrating third-party and internal services with architecture reviews, docs and unit tests
- Improved performance with Redis caching; added rate limiting, reCAPTCHA v3 and App Insights logging and usage analytics

Afiniti — Senior Software Engineer *Lahore* Jan 2022 – Feb 2023

Mega — contact-center product on microservices | NestJS, Next.js, PostgreSQL, TypeORM, TypeScript, Material UI, Stripe

- Service lead for billing and auto-configuration **microservices** (REST APIs, Swagger docs, database design, per-service front-ends); **cut configuration time from 3–5 minutes to under 1 minute** and raised unit test coverage from **0% to 80%**
- Led a team of 4 engineers:** code reviews, client demos, sprint planning and containerized deployments

Nextbridge Pvt Ltd — Software Engineer *Lahore* Sep 2020 – Dec 2021

- Zerodocs.com:** built the SPA from scratch as sole developer: auth, bulk file management, collaboration, chat and AWS S3 bulk uploads
- Valorx:** built a Chrome extension bringing Salesforce data into AG Grid with spreadsheet-style editing, bulk updates and versioning

Educative Inc — Software Engineer *Lahore* Jul 2019 – Aug 2020

- Full-stack work on Educative.io: faster rendering, SEO structured data, React-to-Next.js migration and 80% test coverage

EDUCATION

BS (Hons.) Computer Science — Punjab University (PUCIT), Lahore · CGPA 3.89 · Silver Medalist 2015 – 2019