

MUSTASSUM TANVIR

Forward Deployed AI Engineer

Karachi, Pakistan . +92 311 2771705 . mustassum.tanveer@gmail.com
aibymusti.com . LinkedIn . GitHub

PROFESSIONAL SUMMARY

Forward-Deployed AI Engineer with 5+ years of experience delivering production software at the intersection of customers, product, and engineering. Specialized in LLM applications, Retrieval-Augmented Generation (RAG), full-stack development, cloud infrastructure, and enterprise AI systems. Proven ability to translate ambiguous requirements into scalable, production-ready solutions.

EMPLOYMENT HISTORY

Forward-Deployed AI Engineer

Jul 2026 – Present

DAM Pvt. Ltd. — Karachi, Pakistan

- Partner with customers and stakeholders to translate complex business requirements into production-ready AI and software solutions.
- Lead technical discovery, solution architecture, rapid prototyping, and deployment across enterprise AI, backend, and full-stack systems.
- Design and deploy production AI platforms including LLM applications, Retrieval-Augmented Generation (RAG), workflow automation, and enterprise software.
- Drive cross-functional collaboration between engineering, product, and business teams while iterating on production systems based on customer feedback.

Fullstack AI Developer

Apr 2025 – Jun 2026

- Built and deployed production AI applications across healthcare, legal technology, enterprise SaaS, and digital media.
- Engineered scalable backend services, REST APIs, authentication, databases, and cloud deployments using Node.js, FastAPI, PostgreSQL, MongoDB, and AWS.
- Designed Retrieval-Augmented Generation (RAG) systems, LLM-powered assistants, workflow automation, and AI integrations for enterprise clients.
- Contributed to enterprise platforms by implementing role-based workflows, real-time notifications, support systems, and automated testing.

Tech Lead

Jun 2025 – Feb 2026

OdinDesk (A DAM Product)

- Led development of a multi-tenant conversational AI platform supporting chat and voice agents for enterprise customers.
- Architected LLM, memory, and RAG pipelines, improving response quality through semantic retrieval, reranking, and metadata filtering.
- Built real-time voice agents integrating streaming speech recognition, LLM reasoning, and text-to-speech for production deployments.
- Standardized reusable backend services, deployment workflows, and engineering practices to accelerate customer onboarding.

Founder & CEO

Jan 2024 – Dec 2025

NeuroAudic — Karachi, Pakistan

- Founded an AI startup developing an intelligent bone-conduction hearing aid powered by deep learning.
- Designed real-time audio enhancement pipelines using DTLN for speech intelligibility in noisy environments.
- Led product strategy, engineering, fundraising, and commercialization while securing multiple national innovation awards.
- Built hardware and software prototypes integrating embedded AI, edge inference, and custom audio processing.

Freelance AI Engineer

Nov 2020 – Mar 2025

Freelance — Remote

- Delivered AI and full-stack software solutions for startups and businesses across NLP, automation, computer vision, and analytics.

- Designed scalable web platforms, backend APIs, cloud deployments, and machine learning workflows tailored to client requirements.
- Partnered directly with clients throughout discovery, implementation, deployment, and post-launch support.

EDUCATION

Iqra University
Bachelor of Science in Computer Science

Karachi, Pakistan
Jan 2020 – Dec 2024

- Founder of **NeuroAudic**, an AI startup incubated through IU CORE.
- Recipient of multiple national innovation awards including IEEE STEP’24, Zindigi Prize, and GetInnovative4Impact.

PUBLICATIONS

Human–AI Collaboration in Software Development: Impacts and Future Trends
Research Consortium Archive
Mustassum Tanvir, Amna Sheikh

2026

- Examines how human–AI collaboration is reshaping software engineering through increased developer productivity, improved code quality, and low-code adoption.
- Discusses emerging challenges including AI over-reliance, security risks, and ethical considerations for enterprise software development.

AWARDS & HONORS

- **1st Runner-Up** — IEEE STEP’24 Startup Competition
– Awarded for NeuroAudic, an AI-powered bone-conduction hearing aid startup.
- **Top 10 Finalist** — Zindigi Prize Pakistan
– Selected among Pakistan’s leading university startups.
- **Winner** — GetInnovative4Impact Startup Competition
– Received PKR 30,000 grant for innovation and commercialization.
- **Incubated Startup** — IU CORE Business Incubation Program
– NeuroAudic selected for Iqra University’s flagship startup incubation program.

2024
2024
2024
2024

PROJECTS

Bell System

Node.js, TypeScript, Prisma, PostgreSQL, Socket.IO

- Extended a production enterprise CRM by implementing shared support ticketing, real-time notifications, role-based workflows, and PostgreSQL persistence.
- Added comprehensive unit and integration testing while working within an existing production codebase.

OdinDesk

FastAPI, LangChain, Ollama, ChromaDB, AWS

- Architected a Retrieval-Augmented Generation (RAG) platform supporting enterprise conversational AI with semantic search and document ingestion.
- Designed scalable LLM pipelines for real-time customer interactions and knowledge retrieval.

ContractWalla

Next.js, Node.js, MongoDB, OpenAI

- Built an AI-powered legal assistant automating contract analysis, drafting, and document workflows using large language models.

Hall of Football CMS

Next.js, Express.js, PostgreSQL

- Developed a modular CMS powering dynamic content management, media handling, rankings, player statistics, and editorial workflows.

NeuroAudic

Python, TensorFlow, Coral Edge TPU

- Developed an AI-powered bone-conduction hearing aid using deep learning for real-time speech enhancement in noisy environments.
- Founded and led the startup through incubation and national startup competitions.