

TOUSIF RAZA

Bengaluru, Karnataka | +91-9162213922 | tousifshiekh1033@gmail.com
[linkedin.com/in/tousif-shiekh-a06776367](https://www.linkedin.com/in/tousif-shiekh-a06776367) | github.com/TOUSIF-prog060
AI/ML Engineer | Agentic AI & LLM Systems | Machine Learning | Generative AI

PROFESSIONAL SUMMARY

B.E. graduate in Artificial Intelligence & Machine Learning with hands-on experience shipping production AI systems, including a live iOS transit application and evaluated RAG pipelines. Skilled in autonomous agents and workflow automation with n8n and LangChain, vector databases and tool-use APIs, and generative AI applications on OpenAI, Anthropic Claude, and Google Gemini. Published AI researcher with a strong foundation in Python, ML model development, and computer vision.

TECHNICAL SKILLS

Programming Languages: Python, Java, C, C++, SQL, HTML/CSS

Machine Learning & Deep Learning: Scikit-Learn, TensorFlow, Keras, XGBoost, CNN, Computer Vision, NLP, Predictive Modeling, Ensemble Learning, Pandas, NumPy

LLMs & Agentic AI: LangChain, LangGraph, Retrieval-Augmented Generation (RAG), Vector Databases, Prompt Engineering, OpenAI API, Anthropic Claude API, Google Gemini API, Hugging Face Transformers, Multi-Agent Systems

Automation & Integration: n8n, REST APIs, Supabase, Webhook Integration, Meta WhatsApp Business API, ElevenLabs, Twilio, JSON

Tools & Platforms: GitHub, MongoDB, Power BI, Tableau, Excel, React, TypeScript, Docker

EXPERIENCE

AI/ML Intern — Shankh Technology Pvt. Ltd. | Bengaluru | Feb 2026 – Jul 2026

- Designed and shipped **TransitGo India** — a public transit application now live on the iOS App Store (apps.apple.com/in/app/transitgo-india) — owning the generative-AI layer end to end, from prototype through production release.
- Delivered an autonomous AI voice-calling agent (n8n, ElevenLabs, Twilio) that automated outbound lead qualification end to end, removing manual dialling from the outreach workflow.
- Developed and deployed a WhatsApp Business chatbot on the Meta Business API with LLM-driven conversational flows, product-catalogue integration, and intent recognition for automated customer support.
- Worked across the full SDLC in an Agile team — requirements, design, implementation, testing, debugging, and deployment — focusing on API integration reliability and application performance.

PROJECTS

NyayaRAG: Legal QA System with Evaluation Harness — *LlamaIndex, Chroma, FastAPI, Ragas, Docker*

- Built a retrieval-augmented question-answering system over 2,000 Indian Supreme Court judgments, with a custom ingestion, chunking, and embedding pipeline (BGE embeddings, Chroma) returning answers grounded in retrieved passages with paragraph-level citations.
- Implemented hybrid BM25 + dense retrieval with cross-encoder re-ranking behind a config-driven pipeline, enabling rapid experimentation on chunking, embedding, and retrieval strategies without code changes.
- Engineered an evaluation harness using Ragas and DeepEval over a manually verified, stratified eval set — tracking context recall, precision, faithfulness, and hallucination rate — wired into a GitHub Actions CI gate that fails builds on metric regressions.
- Served the pipeline as a typed FastAPI REST endpoint with latency and token-cost instrumentation, containerized with Docker and deployed as a public demo with an explicit refusal path for unanswerable queries.

AI Voice Calling Agent — *n8n, ElevenLabs Conversational AI, Twilio, Google Sheets API, JavaScript*

- Built an autonomous outbound voice-calling agent that pulls leads from Google Sheets on a schedule, places AI-led conversational calls via the ElevenLabs-Twilio API, and writes call outcomes and transcripts back to the sheet.
- Implemented phone-number normalization and validation in JavaScript, plus batch looping with wait-based rate limiting and conditional branching, to control call volume and prevent duplicate dials.

Agentic Cold-Outreach Automation — *n8n, Gmail API, Google Sheets API*

- Designed and deployed an autonomous n8n workflow automating personalized cold-email outreach at scale via Google Sheets and Gmail APIs, with dynamic template personalization and duplicate-send prevention.

Multi-Model Agri-Tech AI Platform (KisanMitra) — *Python, Flask, Scikit-Learn, TensorFlow*

- Built an AI-driven agriculture platform combining crop recommendation, fertilizer suggestion, and plant disease detection models to help farmers optimize yield.
- Trained classification and recommendation models with Scikit-Learn, applied CNN transfer learning in TensorFlow for disease detection, and deployed on Heroku with weather-API integration.

EDUCATION

B.E., Artificial Intelligence & Machine Learning — Sir M Visvesvaraya Institute of Technology, Bengaluru | 2022 – 2026

12th Grade (Board) — Doon Public School, Patna | 2021 – 2022

PUBLICATIONS

"KisanMitra: An AI-Driven Smart Agriculture System for Crop Prediction, Fertilizer Recommendation, and Disease Detection" — Co-author (4th of 5). Presented at FutureTech-2025 International Conference, Institute of Technical and Scientific Research, Dec 2025.