

DEBABRATA DEY

Backend Engineer

📞 +91-9907862275 ✉️ debabratadey9090@gmail.com 🌐 [Portfolio](#) 🐙 [GitHub](#) 🔗 [LinkedIn](#)

Summary

Backend Engineer in Python, FastAPI, and Django, designing and building AI-integrated products and scalable APIs from the ground up, with a focus on clean architecture, currently expanding into Go.

Experience

AI/ML Engineering Intern

May 2026 – Aug 2026

Infosys Springboard (Remote)

Tools Used: FastAPI, MediaPipe, OpenCV, LangGraph, PostgreSQL, Elasticsearch, Celery, Redis, Docker

- Engineered a CV + LLM pipeline processing athlete videos up to 500MB, **delivering risk scores in <40s and corrective plans in <5s**.
- Architected a 7-router backend with 3-role RBAC, JWT + Google OAuth, and slowapi rate limiting serving athletes, coaches, and admins.
- Containerized across 6 Docker services with WebSocket chat, Redis Pub/Sub, Elasticsearch search, and GitHub Actions CI/CD with full Pytest coverage.

Skills

Languages: Python, SQL

Backend & Infra: FastAPI, Django, WebSockets, Webhooks, PostgreSQL, MySQL, Redis, Celery, Docker, GitHub Actions

AI/ML & LLM: LangChain, LangGraph Agents, RAG, MediaPipe, OpenCV, SentenceTransformers, Vector DB

Projects

MeetMind – Meeting Highlights & Chat Assistant | 🐙 [GitHub](#) 🌐 [Live](#) Jan 2026 – Mar 2026

Python, FastAPI, PostgreSQL, Qdrant, Cloudinary, Celery, Redis, AssemblyAI, VoyageAI, Groq LLM, JWT

- Built MeetMind, a cloud-native AI platform that transcribes meetings, generates semantic embeddings, and powers real-time conversational Q&A over transcripts.
- Enables teams to instantly search and query meeting content instead of manually rewatching recordings or taking notes, with multi-user support and third-party integrations.
- Delivered **500MB–2GB+** uploads with zero 413 errors, **300–800ms** chat latency (<5ms cached), **<3 min** end-to-end processing, **\$0/month** storage cost.

FreelanceFlow – Freelance Marketplace with AI Worklogs | 🐙 [GitHub](#) 🌐 [Live](#) Apr 2026 – Jun 2026

Django, PostgreSQL, Redis, Celery Beat, Elasticsearch, LangGraph, Docker, Nginx, Azure VM, Azure Blob

- Architected a modular freelance marketplace with Razorpay escrow, WebSocket chat, and row-level locking, **eliminating race conditions** across all payment flows.
- Built a LangGraph **AI worklog** that extracts structured deliverable reports from freelancer chat in **under 2 minutes** with LangSmith observability.
- Hardened the platform with IDOR prevention, rate limiting, and brute-force lockout; deployed via multi-stage Docker on **Azure VM** behind Nginx.

Achievements & Certifications

- **Ranked 183 out of 10,000+ teams — Amazon ML Challenge 2025 (Top 2%):** Built a multimodal price prediction system using EfficientNet and an XGBoost-LightGBM ensemble on zero budget.
- **Samsung Innovation Campus (2025):** Completed a structured programme covering AI fundamentals and practical machine learning applications.

Education

B.Tech in Computer Science and Engineering

Graduating: 2027

Brainware University, Kolkata