Omkar Deepak Khadilkar

Applied AI Engineer
I build AI systems that know when they're unsure

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Nationality: Indian

Skills

Programming	Python (pandas, NumPy, scikit-learn, statsmodels, linearmodels), SQL, TypeScript
AI & NLP	Confidence-gated LLM pipelines, structured output with citations, calibration, FinBERT
Data	dbt Core, DuckDB, PostgreSQL, sqlglot lineage, data quality checks
Tools	Git, GitHub Actions, Jupyter, Next.js, Vercel, Claude, LaTeX
Languages	English: fluent (C1, IELTS 7.5) | German: beginner (A1), learning | Marathi: native

Education

10/2025 – Present **M.Sc. Big Data and Business Analytics**, *FOM University of Applied Sciences*, Essen
Average grade 1.8 so far. Information Security 1.0, Big Data Analytics 1.3, Business Analytics 1.3.

2020 – 2024 **B.Tech. Electronics & Telecommunication Engineering**, *Somaiya Vidyavihar University*, Mumbai, India
CGPI 8.29. Minor in Information Technology.

Projects

11/2026 **faultline: reliability assistant for dbt pipelines**, *open source, github.com/omkar-k0/faultline*
- Fault-injection benchmark: 192 incidents, 8 fault types, 4 dbt projects, sealed held-out split.
- Triage names the exact root cause for 89.6% of 48 dev incidents with no wrong answers (dbt tests: 0%; raw logs to a local LLM: 2.1%). Held-out score pending.

10/2026 **Werkbank: order routing for furniture workshops**, *live demo, github.com/omkar-k0/werkbank*
- Routes free-text orders (EN/DE) to the right workshop via a calibrated confidence gate; unsure ones go to review.
- 60 hand-written requests: 40% routed automatically at 95.8% accuracy, 23% sent to review.

09/2026 **Sustainability Commitment Classifier**, *github.com/omkar-k0*
- Sorts 1,562 environmental commitments from five German companies into quantified or vague; 12.3% carry a number.

06/2026 **Capital Structure of DAX 40 Firms**, *FOM term paper, 4-person team, grade 1.3*
- Led data collection, analysis and write-up: a 127-observation panel of 32 non-financial DAX 40 firms built in Python.
- More profitable firms carry less debt: $p = 0.09$ in the preferred year-effects model, $p = 0.004$ within firms (firm and year effects).

05/2026 **Sector Sentiment in SEC Filings with FinBERT**, *academic project*
- Fine-tuned FinBERT on SEC EDGAR filings to compare Oil & Gas and Enterprise Software sentiment.

Experience

04/2026 – 09/2026 **Operations Working Student**, *Picnic GmbH*, NRW, Germany
Night-shift logistics in a metric-driven operation (14 h/week), alongside full-time study.