# Ketan Darekar

Mannheim, Germany | +49 17667708933

[ketan.darekar99@gmail.com](mailto:ketan.darekar99@gmail.com) | [LinkedIn](#) | [GitHub](#) | [Website](#)

## SUMMARY

Master's student in Applied Computer Science with practical experience in building LLM-powered applications using React.js, Node.js, and Python. Skilled in developing scalable backend systems, integrating OpenAI APIs, and deploying on AWS using CI/CD pipelines. Passionate about creating impactful, AI-driven products in agile, remote-first teams.

## EDUCATION

**Master of Science in Applied Computer Science**                                 **Oct 2023 - Sep 2025**
SRH Hochschule, Heidelberg

**Bachelor of Computer Application**                                 **Aug 2019 - April 2022**
MIT ACSC, Pune

## PROJECTS

**AI Powered Chatbot & Assistance Platform**                                 [source code](#)

- Built an AI-powered chatbot with real-time chat, image handling, and secure login. Used React.js for the UI, Node.js, Express.js for the backend, Gemini API for AI responses, and MongoDB Atlas to store chat history.
- Integrated live data via OpenWeather and News APIs, enhanced by Gemini's context-aware responses.

**Ecommerce Web Application with Stripe and firebase**                                 [source code](#)

- Developed a full-stack e-commerce application with features like product browsing, real-time cart updates, and secure checkout. Designed the frontend using React.js, Tailwind CSS and built the backend with Node.js, Express.js.
- Integrated Stripe for payments, Firebase for authentication and real-time data, and MongoDB for product storage.

**Hotel Management System**                                 [source code](#)

- Built a desktop-based Hotel Management System with room booking, automated billing, and customer record tracking. Developed the UI using Java Swing and AWT for a smooth user experience.
- Connected to MySQL via JDBC for reservations, billing, CRUD, and invoice generation with data validation.

## WORK EXPERIENCE

**AI Research Thesis - Retrieval-Augmented QA System for PDF & Web Content**                                 [source code](#)
**SRH Hochschule Heidelberg** · Apr 2025 – Sept 2025 (ongoing)

- Currently developing an AI-powered question-answering system using Retrieval-Augmented Generation (RAG) to extract structured information from PDF and web content, leveraging PostgreSQL and LangChain.
- Implementing scalable backend logic with Python and FastAPI, focus areas include chunking strategies, metadata handling, and NLP integration for large-scale retrieval efficiency.

## SKILLS

- **Technical Skills:** HTML, CSS, JavaScript, Java, Python, React.js, Node.js, MySQL, Git, GitHub, REST APIs.
- **Technical Competencies:** Full Stack Development, AI, LLMs, OpenAI API, Bug fixing, PostgreSQL,
- **Soft Skills:** Teamwork, Communication, Problem-Solving, Critical Thinking, Time Management.
- **Language Skills:** English (C1), German (B2), Hindi (Native), Marathi (Native).

## CERTIFICATIONS

- Full Stack Software Developer  - **IBM, 2025**                                 [Certificate](#)
- Python Full Stack – **CJC, 2023**                                 [Certificate](#)
- German B1 & B2 - **Goethe Institute, 2023**                                 [Certificate](#)
- Azure fundamentals – **Microsoft, 2022**                                 [Certificate](#)