

SANCHAY NARENDRA GAWANDE

sanchay@work-mail.net | +1(857)-395-5752 | Massachusetts, USA | [LinkedIn](#) | [Github](#) | sanchaygawande.com

SUMMARY

AI Software Developer with 3+ years of experience building **interpretable, reasoning-based AI systems** using **GPT-4, LLaMA, LangChain**, and **FAISS**. Proven success in leading architecture design for **LLM-integrated applications**, optimizing AI pipelines for **verifiable outputs**, and deploying solutions at scale across healthcare and financial domains. Strong foundation in **scientific reasoning**, cross-functional collaboration, and aligning deep-tech AI models with real-world decision-making workflows.

SKILLS

- **Programming & Frameworks:** Python, TypeScript, Node.js, Flask, FastAPI, React.js, Next.js, Java (Spring Boot)
- **AI/ML & NLP:** GPT-4, LLaMA, LangChain, RAG, FAISS, BERT, XGBoost, Hugging Face, PyTorch, TensorFlow
- **Data & Visualization:** PostgreSQL, MongoDB, Firebase, Redis, D3.js
- **Cloud & DevOps:** AWS (EC2, Lambda, S3, CloudFront, API Gateway), Docker, Kubernetes, Terraform, GitHub Actions
- **Core Concepts:** Interpretable AI, Verifiable Reasoning, NLP, Scientific Document Understanding, Knowledge Graphs, Microservices, CI/CD

PROFESSIONAL EXPERIENCE

Software Engineer, Nestor Technologies 10/2023 – Present | Remote, USA

- **Designed and deployed interpretable AI reasoning architecture** in the form of *Iconcern*, a GPT-4-powered chatbot tailored to support clinical decision-making for healthcare professionals, handling **10,000+ patient cases**.
- **Advanced factual accuracy and transparency in reasoning** by implementing **Retrieval-Augmented Generation (RAG)** using **LangChain** and **FAISS**, resulting in a **40% boost in traceable answer accuracy** and a **30% reduction in response time**.
- **Led the backend microservice re-architecture** of Iconcern using **Node.js, FastAPI**, and **GraphQL**, reducing API response latency by **30%**, enabling scalable reasoning under high concurrency.
- **Refactored the client interface** with **React.js, Next.js**, and **TypeScript**, ensuring fast loading (40% improvement) and accessibility (**WCAG 2.1 compliant**), which led to a **35% increase in provider interaction rate**.
- **Built a fully containerized CI/CD deployment pipeline** with **Docker** and **GitHub Actions**, cutting release time by **40%** and minimizing production rollout errors.
- Collaborated across **ML research, engineering**, and **clinical domains** to align Iconcern's AI reasoning with high-stakes real-world outcomes, achieving a **98% user satisfaction score**.
- Delivered **interpretable, verifiable AI outputs** by prioritizing **transparent model behavior** and grounding chatbot answers in structured, evidence-based documents — a transferable framework for reasoning in scientific domains.

Software Engineer, Infosys 06/2021 – 08/2022 | Bengaluru, India

- **Increased customer retention by 25%** by designing and deploying a churn prediction system for a financial institution using **Flask, PostgreSQL**, and **React.js**, enabling real-time intervention strategies.
- **Enhanced fraud detection accuracy by 30%** by implementing explainable AI models using **XGBoost** and **BERT**, reducing false positives by 25% and improving regulatory compliance.
- **Delivered actionable business insights** through a real-time analytics dashboard built with **D3.js** and **React.js**, increasing marketing campaign efficiency by 35%.
- **Improved scalability and reliability** by migrating backend systems to **AWS EC2, S3**, and **CloudFront**, achieving 99.9% uptime for 100,000+ concurrent users.
- **Reduced model iteration time by 40%** by deploying production-ready ML pipelines with **AWS Lambda** and **Docker**, accelerating experimentation and integration cycles.
- **Reduced database query time by 40%** by optimizing SQL queries and indexing strategies, enabling faster access to churn and fraud analytics for business analysts.

EDUCATION

Master of Science - Computer Science 09/2022 – 05/2024 | Boston, USA
University of Massachusetts, Boston

Bachelor of Engineering - Computer Science and Engineering Maharashtra, India
Sant Gadgebaba Amravati University