ADITI GUPTA

AI Engineer · Applied AI
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PROFILE

AI Engineer with nearly 8 years in analytics and software engineering across healthcare and banking. I build AI agents and RAG systems, from retrieval to evaluation. Open to full-time AI Engineer, Applied AI, and Forward Deployed Engineer roles.

SKILLS

AI & Agents: LangGraph, CrewAI, LangChain, RAG, ChromaDB, RAG evaluation, QLoRA fine-tuning
Backend & Web: Python, SQL, FastAPI, Pydantic, Docker, Streamlit, HTML, CSS, JavaScript, Node.js, React.js
Data & Analytics: Tableau, MS Excel (Advanced), market mix modeling, segmentation, patient analytics
Machine Learning: scikit-learn, logistic regression, neural networks, probabilistic models, MLE, gradient ascent

AI PROJECTS

- **Prior Authorization Multi-Agent System** *(CrewAI, Python):* Built four agents (Extractor, Policy Checker, Writer, Reviewer) that check an MRI request against payer criteria and draft the authorization letter, with a reviewer loop for up to three revision rounds.
- **Patient Risk Flagging Agent** *(LangGraph, GPT-4o-mini, ChromaDB):* Built an agent that reviews clinical notes, checks medications against kidney function, and scores patient risk, using RAG for clinical guidance, a human review checkpoint for high-risk cases, and an audit log.
- **Browser Agent Reliability** *(browser-use, GPT-4o, Pydantic):* Built a Yelp search agent and hand-scored 40 of its runs. It said it succeeded every time but got a third wrong. Having code make the final pick got it to 80% correct at less than half the cost.
- **RAG Chatbot and RAG Evaluation** *(OpenAI embeddings, Chroma):* Built a chatbot that answers questions from an uploaded PDF, and an evaluation pipeline that measures retrieval and answer quality.
- **ML Apps** *(scikit-learn, FastAPI, Docker):* Built an insurance premium predictor and a QLoRA sentiment classifier.

PROFESSIONAL EXPERIENCE

Business Analyst **ACUITAS360** (New Jersey) [Jul 2024 – Mar 2025]

CONVERSATIONAL AI AGENT *for sales data questions.*

- Built a conversational AI agent using LangGraph, GPT-4o, FastAPI, and SQLite that converts plain-English questions into SQL over sales data (57K+ transactions), so sales reps can get answers on revenue, territory, and customer trends without waiting on the analytics team.

SUPPORTING THE COMMERCIAL EXCELLENCE TEAM *for an oncology product used to treat nausea during chemotherapy.*

- Supported the Helsinn Therapeutics analytics team (client) to understand their analytics needs and provided recommendations using multiple datasets.
- Performed fuzzy matching to map OneOncology accounts to 867 data using account demographic information, to categorize accounts into groups, calculate change in volume distribution over time, and estimate share of absolute growth by group.
- Developed volume concentration curves for Akynzeo to understand the spread of business and identify top accounts.
- Built an interactive Tableau dashboard for Akynzeo to measure multiple KPIs and analyze sales trends and performance.
- Delivered weekly Rebate Entity Reports for OneOncology, Unity, and multiple territories using Excel macros, and prepared Akynzeo data from SQL databases to support the KAM tool.

Associate **COGNIZANT** (India) [Sep 2020 – Dec 2021]

MARKET MIX MODELING *for a major product used for the treatment of heart failure.*

- Estimated sales attributable to promotional channels (calls, samples, emails, direct mail, paid search), accounting for brand equity, sales lag, and historical efforts.
- Modeled current-month Rx as a function of promotion and previous-month Rx in Python to capture lag effects.
- Segmented physicians by specialty, market decile, and NRx decile, and calculated optimal spend and ROI by channel and segment.

Senior Software Engineer **NIHILENT LTD** (India) [Apr 2017 – Sep 2020]

SUPPORTING THE COMMERCIAL EXCELLENCE TEAM *for a specialty product used to treat migraine.*

- Delivered weekly and monthly reports with the onshore team on KPIs such as referrals, active patients, new starts, and net sales.
- Created at-risk reports to flag patients likely to drop off therapy, and built Tableau dashboards for the Sales and Marketing teams.

INTERNET BANKING AND T24 DEVELOPMENT *for Nedbank Africa.*

- Built Temenos Transact (INFO BASIC) routines for Nedbank's corporate internet banking during its move to Oracle FLEXCUBE.
- Extracted account and loan data for credit bureau reporting, ran Close of Business (COB) in production, and fixed COB incidents.

Programmer Analyst **COGNIZANT** (India) [Jan 2015 – Apr 2017]

DEVELOPMENT AND CUSTOMIZATION *for Bank Julius Baer, Singapore.*

- Developed and supported core banking applications on Temenos T24, including data customization, data migration, and integration.

EDUCATION AND PROFESSIONAL DEVELOPMENT

***Stevens Institute of Technology**, Hoboken, NJ* – Master of Science in Computer Science, GPA: 3.93/4 [Jan 2022 – Dec 2023]
***Rajasthan Technical University, SKIT**, Jaipur, India* – B.Tech. in Computer Science, GPA: 3.6/4 [Jul 2010 – May 2014]
Stanford University – Probability for AI (in progress) [2026]