

# Kanu Madhok

952-303-1045 • madhok.kanu@gmail.com • [github.com/kmadhok](https://github.com/kmadhok) • [linkedin/in/kanu-madhok](https://linkedin/in/kanu-madhok)

## Professional Experience

---

### Walmart

Chicago, IL

#### Senior Data Analyst

September 2024 - Present

- Led built and launched a GenAI text-to-SQL copilot over Walmart BigQuery schemas (RAG + 12K-query corpus) enabling users to self-serve analysis; 95% SQL accuracy, ~80% faster query creation, saving ~20 hours per 100 queries.
- Decreased survey development and targeting time by 30% by engineering RFM and demographic profiles in BigQuery, analyzing 270M+ customer records to precisely align niche behavioral segments with supplier criteria.
- Developed a Logistic Regression propensity-to-respond model on 700K+ panelists, increasing survey completion by 22% while reducing survey fatigue by cutting outreach volume by 40%.
- Developed a Power BI dashboard with DAX-based KPI definitions and segmentation views, integrated with BigQuery + a text-to-SQL copilot; enabled supplier teams to self-serve targeting decisions, driving 32% more launches, ~\$50K incremental revenue, and +10% responses.

### Data Science Institute at The University of Chicago

Chicago, IL

#### Graduate Student Researcher for Data & Democracy Research Initiative

January 2024 - September 2024

- Built a persona-driven multi-LLM (OpenAI + Gemini) with temperature/persona tuning chatbot for a staged donation experiment (500+ participants), identifying political concerns and persuading 15% to donate to an opposing cause via controlled A/B tests.

### Innovare (EdTech Startup)

Chicago, IL

#### Data Scientist

October 2022 - March 2023

- Delivered analytics and Looker Studio dashboards for 10+ districts (5,000+ students), aligning KPIs and intervention reporting.
- Built a logistic regression risk model and surfaced weekly risk scores in dashboards, improving retention +7% and reducing failures 15%.
- Built an automated ELT pipeline to BigQuery (Dataprep, SQL, Python) with QA checks, improving reporting accuracy 23% and reducing manual prep.

### FTI Consulting

Chicago, IL

#### Consulting Project Proposal for FTI Consulting

January 2024 - August 2024

- Developed and deployed a RAG application that ingests prior proposals to generate new drafts; cut proposal time ~30% (3+ hours saved per project) and integrated into team workflow.
- Improved generation by 34% through query rewriting and retrieval by 42% through adaptive chunking; packaged as a Dockerized Streamlit app deployed on AWS ec2 machines.
- [Won Best in Show in University of Chicago's MS in Applied Data Science Capstone](#)

## Projects

---

- Built a Streamlit text-to-SQL copilot (RAG over historical queries) that cuts analysis turnaround ~80% by retrieving relevant SQL + schema context, generating validated BigQuery SQL, executing it, and returning answers with auto-visualizations (Gemini 2.5).  
Deployed Project: <https://sql-rag-frontend-simple-481433773942.us-central1.run.app/>

## Skills

---

- LLM/NLP and Retrieval: RAG, NL->SQL, evaluation pipelines, agentic workflows, context engineering
- ML/Stats: Python, SQL, R, PySpark; TensorFlow, PyTorch, scikit-learn; A/B testing, time series, clustering, Bayesian, ensembles
- Data and Infra: BigQuery, Databricks, MySQL, Hive; Docker, Streamlit; AWS/GCP; Tableau, Power BI, Looker Studio.

## Education

---

The University of Chicago – Master of Science in Applied Data Science | GPA 4.0

Loyola University Chicago – Bachelor of Science in Information Systems and Economics | GPA 3.5