

# Lakchchayam Khare

Toronto, ON | lakchchayam.khare@gmail.com | +1 (647) 581-7542  
lakchchayam.github.io | linkedin.com/in/lakshyamkhare

## Professional Summary

---

Applied AI engineer (MSc CS) with **2+ years** shipping product functionality that **integrates LLMs and APIs directly**—not only AI-assisted coding. Hands-on with **agents, tool use, structured outputs, RAG, context engineering, and evals** tied to production quality. Thrives in **ambiguous 0–1** settings: clarifies root problems, prioritizes ruthlessly, and delivers end-to-end (**FastAPI, CI/CD, Docker/Kubernetes**) with measurable impact. Strong written and verbal communication with technical and non-technical partners; active builder with public work at **lakchchayam.github.io**.

## Professional & Research Experience

---

### Applied AI Engineer

Nov 2024 – Mar 2026

*Lushio Fitness (Applied AI)*

- Owned end-to-end delivery of a production **multi-agent** stack (**LangGraph**): supervisor/research/writer flows, **tool integration**, and **structured multi-step reasoning** over 100K+ enterprise transactions.
- Built **RAG** with **Pinecone**, chunking, and context design that reduced LLM hallucination by **35%**; tuned prompts, grounding, and retrieval for reliable, user-facing answers.
- Shipped **FastAPI** LLM services on **Docker/Kubernetes** (99.2% uptime) with **CI/CD**, eval hooks, monitoring, ground-truth capture, and retraining triggers across six AI microservices.
- Improved domain accuracy by **28%** via **SFT/PEFT (PyTorch, Hugging Face)** on proprietary corpora—example of model/API-led iteration with clear before/after metrics.

### Applied AI Engineer (Research Assistant)

Sep 2022 – Sep 2024

*Western University*

- Engineered **PySpark/Python** pipelines on **8M+** records from 14 sources; delivered clean, analysis-ready datasets for modeling in a research environment with shifting requirements.
- Shipped predictive models (**scikit-learn, XGBoost**) with automated **evaluation and monitoring** over 2.3M+ test cases; integrated **AWS/GCP** and aligned stakeholders on metrics and handoff.

### Research Intern (MITACS)

May 2021 – Sep 2021

*MITACS / Université de Sherbrooke, Canada*

- Built Python ingestion/ETL for 50K+ documents, reusable NLP libraries, and faster experimentation cycles (60% less manual prep) in a small-team, greenfield setting.

## Technical Skills

---

**Applied LLM:** LLM APIs & Integration, LangGraph, LangChain, Agents, Tool Use, Structured Outputs, RAG, Context Engineering, Prompting, Evals, Fine-tuning (SFT, PEFT), PyTorch

**Execution:** Python (Expert), FastAPI, SQL, PySpark, Docker, Kubernetes, CI/CD, Git, PostgreSQL, Pinecone, AWS, GCP

## Education

---

**Western University** | *Master of Science in Computer Science* | Graduated 2024

**Thesis:** “Security and Integration in Business Intelligence Tools: A Comprehensive Study.”

- Focus Area: Integration, access control, and trustworthy systems when rolling analytics and automation into real organizations.
- Funding: Mitacs Globalink Graduate Fellowship (\$15K) + Ontario Graduate Scholarship (\$15K).