

Aryan Santosh Shirke

+1 (607) 262-9822 | shirke.aryan223@gmail.com | as4623@cornell.edu | Cornell | LinkedIn | GitHub

EDUCATION

Cornell University

Ithaca, NY

Master of Professional Studies in Information Science and Engineering

Expected: May 2027

- MPS Project: Agentic AI Platform for Causal Inference

Indian Institute of Information Technology Dharwad

Dharwad, India

Bachelor of Technology in Computer Science and Engineering; GPA: 7.20/10

May 2025

- Thesis: Speaker Verification Spoof Detection with Contrastive Learning

EXPERIENCE

Google

Sep 2026 – Present

Product Lead MPS Capstone, Cloud Data Science

Ithaca, NY

- Developing an open-source **causal inference Python framework** to power data-driven decision intelligence, enabling **enterprise** leadership to **accurately** isolate and quantify the true business impact of product launches and operational shifts
- Automated pipelines to run **multi-method causal modeling**, including propensity score matching, instrumental variables, and difference-in-differences (Diff-in-Diff) accelerating experiment analysis across non-experimental datasets
- Designed a **robust simulation-based validation suite** to stress-test model performance against confounding bias, pairing automated diagnostic charts with **agent-ready technical documentation** to drive interpretable AI-assisted analysis

Mahindra

Jan 2025 – Aug 2026

Product Lead

Mumbai, India

- Orchestrated cross-functional AI strategy with **HR, Finance, and Engineering leadership**, prioritizing enterprise automation by **ROI and feasibility** to deliver a production GCP/Qlik **0→1 MVP in 22 days**—driving a **20% reduction** in processing time, **100% data accuracy**, and rapid **48-hour** user adoption
- Launched **CaraBot**, an AI-native voice agent utilizing **embeddings-based routing** and **Gemini 2.5 Pro** as the reasoning layer to autonomously classify and route calls; standardized compliance workflows and resolution for **3,000+ vendors**
- Architected the redesign of **GenieBot**'s HR ticketing system, replacing manual triage with an autonomous conversational agent powered by **Google ADK** and **Azure (text-embedding-ada-002)** semantic routing; shipped **5 iterative MVPs in 2 months**, achieving **92.5% overall accuracy** and saving up to **1 hour per request** (projected **\$8.4K/yr** in OpEx savings)

Upwork (Freelance)

Aug 2025 – Aug 2026

AI Product Consultant and Developer

Remote

- Directed the end-to-end product lifecycle of **5 AI solutions** across 3 client engagements, including a predictive **juror classification platform** (ML + Next.js) that achieved a **78.76% F1-score** and drove an **83.3% reduction** in evaluation time
- Productized an **Intelligent Document Processing (IDP)** solution for logistics, automating ingestion of **100+ monthly shipment records** and extraction of **29 KPIs** at **93.3% accuracy**, slashing processing time by **85.4%**
- Scaled a domain-specific **RAG product** supporting **1,200+ users/queries**, boosting answer relevance by **86%** while cutting latency and infrastructure costs by **43%** across enterprise workloads

LEADERSHIP & RESEARCH

INFO 4125/5125 Project Management

Aug 2026 – Present

Teaching Assistant Lead

Ithaca, NY

- Lead a 3 member TA team managing course operations and project frameworks while productizing an AI-driven oral assessment tool (local embeddings, speech-to-text) to automate secure evaluations across 110+ questions

Department of Food Science

Aug 2026 – Present

Student Researcher, Food Science Lab Automation

Ithaca, NY

- Spearheaded IoT lab automation by architecting a Python/Linux PID control system on Raspberry Pi, engineering high-reliability data logging and systemd workflows to scale experimental operations

TECHNICAL PROJECTS

Glimpse | Founder

Jan 2026 – July 2026

- Founded and launched **Glimpse**, an AI-native event platform; architected core product UX including **zero-tag facial recognition** and “Me + Them” group discovery using a face-clustering engine (VirAI) to automate retrieval across bulk uploads of up to **50,000 images/event**
- Spearheaded the GTM and monetization strategy, defining tiered subscription pricing (**\$15–\$95**) targeted at **61–75% gross margins** alongside premium AI add-on upsells that drastically reduced post-event customer support overhead

Ather Agent

Oct 2025 - Mar 2026

- Productized a **multi-agent HR analytics platform** combining **NL2SQL, NL2Py, and BQML**; orchestrated autonomous AI workflows to support **13+ complex use cases**, automating **102+ monthly queries** with an **88% execution success rate** and driving a **36% reduction** in time-to-insight
- Scaled secure GCP cloud infrastructure with **enterprise data governance**, maintaining a strict **14-second latency SLA** while driving multi-team adoption across **65+ active enterprise users** in **3 distinct HR departments**

TECHNICAL SKILLS

Product: Roadmapping, Stakeholder Management, Cross-functional Leadership, PRDs, OKRs, A/B Testing

Technical: Python, SQL, PyTorch, HuggingFace, LLMs, AI Agents, RAG, Prompt Engineering, APIs, Git, Docker