Parth Mitesh Shah

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Objective: Graduate student in Computer Science at ASU, specializing in AI and data science, with hands-on experience in LLMs, RAG, and data pipelines, seeking Spring Co-Op opportunities and full-time roles post graduation in May 2025.

Education

Arizona State University (Tempe, AZ)

May 2025

Master of Science in Computer Science

GPA: 4/4

Awards: Secured Experiential Learning Grant and Graduate College Travel Award

Academic Assistance: Grader for CSE 572 Data Mining

May 2023

Ahmedabad University (Ahmedabad, India)

1VIAY 202

Bachelor of Technology in Computer Science and Engineering

GPA: 3.37/4

Academic Assistance : Teaching Assistant for CSE 533 Social Network Analysis and CSE 250 Data Structures

Skills

Languages and Technologies: LlamaIndex, Ollama, Weaviate, Python, SQL, Streamlit, AWS, Git, Docker, GraphQL.

Experience

Al Engineering Intern at Quantera.ai [LlamaIndex, OLlama, AWS]

August 2024 - Present

- Built a visualization engine to extract data, figure plot requirements and generate code to build plots from relevant sources for question-answer pairs. Served this as a single FastAPI endpoint to frontend.
- Developed cron jobs to automate daily ETL processes for updating Top 500 US companies' earnings calls.
- Collaborated with cross-functional teams to enhance data-driven insights for financial analysis.

Research Engineer at <u>DaRL Lab</u> [GraphRAG, Ollama, Streamlit]

August 2024 - Present

- Developed a framework enhancing LLMs with Retrieval-Augmented Generation (RAG) and
 Chain-of-Thought (CoT) prompting to ensure trustworthy and evidential response generation.
- Engaged in discussions and shared insights with fellow researchers and professionals to drive innovation in AI and information retrieval.

Research Intern at Ethical Spectacle Research [DSPy, LangChain, LLMs] June

June 2024 - August 2024

- Designed and deployed a robust backend for the SADIE platform, enabling seamless interaction and information storage across multiple language model agents on Weaviate.
- Orchestrated simulations with hundreds of agents to analyze emergent network effects, improving data accuracy and reliability by 15% for research.
- Developed algorithms to filter toxic and promote constructive ideas, contributing to AI ethics research.

Publications and Key Projects

Text-to-Video Generation Model (Vermilion) | Intelligent Data Pipeline (IDP) Team

December 2024

Programmed ASU's text-to-video model, Vermilion, as part of the IDP team. Produced data pipelines for datasets like Panda70M, OpenVid1M, and VidGen1M, focusing on recaptioning with local models and preparing for future team integrations.

EvidenceChat (Paper) | [RAG, Evidential Response, LLM]

August 2024

Built a RAG Enhanced LLM Framework for Trustworthy and Evidential Response Generation; Accepted at the Agent4IR workshop at the 33rd Conference for Information and Knowledge Management (CIKM 2024).

Leaderships & Extracurricular

Student Relations Lead (AiSalon Phoenix)

June 2024 - Present

Bridging collaboration between the ASU student community and AiSalon Phoenix through innovative programs.

Lead (HackClub, School of Engineering at Ahmedabad University)

April 2022 - April 2023

Served as a convener, speaker, and mentor for 20+ events and workshops, engaging with many participants.