

Adit Agarwal

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Education

University of Illinois Urbana Champaign

Champaign, IL

MS in Computer Science, BS in Computer Science & Advertising

Aug 2022 - May 2026

GPA: 3.83 - 2x Dean's List + James Scholar Coursework: Systems for Gen AI, Algorithmic HF Trading, Algorithms, Distributed Systems, Machine Learning, Parallel Programming, Data Structures, Systems Programming,

Experience

Software Engineering Intern – Meta (Superintelligence Labs) *New York City, USA* May - Aug 2025

- **Architected** and launched Meta's **first Model Context Protocol (MCP)**—a standardized context-sharing protocol for LLMs—infrastructure and **AI Agent** framework, enabling tool **orchestration** and streamlined data flow.
- **Scaled MCP system** to support **multi MCP server** architecture, integrated 5+ external toolsets, and onboarded **three cross-functional engineering teams** to leverage the agent for their teams.
- Enhanced a Social Search Agent by designing **LLM-based intent parsing** & implementing **high-performance PHP/C++ retrieval** pipelines across Facebook & Instagram - enabling natural lang search.
- Developed a new **Shopping Agent** that leverages MCP to aggregate and rank product listings from **Facebook Marketplace and eBay** based on user-specified filters, achieving 92% accuracy on **agentic evals** in matching intent and supporting real-time recommendations.

AI/ML Engineering Intern – Droisys (account360.ai) *Las Vegas, USA* June 2024- Aug 2024

- Developed AI based features for Account360, a CRM tool used by major alcohol distributors/suppliers.
- Built a tool for automated **generation of customized advertising creatives**. Fine tuned (LoRA) a **text to image** latent diffusion model and developed a streamlined UX for designers. The tool converts text mentioning the brand name to an **immediately usable (one shot) advertising creative** (image) optimized for the beverage industry, and even supports various aspect ratios for different media platforms.
- Engineered a **RAG based chatbot** to enable simple **data analytics** and provide sales **recommendations** using LLM powered **code generation, DB query generation, and vector search** on MongoDB. The chatbot integrates into beverage sales reps' **app based workflows**, allowing them to surface **metrics and recommendations** backed by image data (stockist shelves) and sales data.
- Used Python, React, ControlNet, Stable Diffusion (SD3-medium), MongoDB, FAISS, OpenCV, YOLOv8

Projects

Generative AI Quizzing Platform | *Python, React, langchain, FAISS, OpenAI*

- Developed a Generative AI based quizzing system as a study aid for students. It allows users to upload a PDF of desired text for question generation based on user queries using ChatGPT API.
- Utilized **langchain** for text vectorization and **FAISS** for document retrieval.
- Implemented an interactive frontend using **React**.

COVID Vaccine Twitter Bots (India) (linktr.ee/covidvaxind) | *Python, Twitter API, AWS, APISetu*

- Programmed Twitter bots that autonomously tweet about real-time COVID vaccine availability in 6 major Indian cities by scraping government sources. Updates with new availability every minute.
- Received over **2 million** impressions and over **2000 followers**

Technical Skills

Languages: Python, C++, C Java, JavaScript, Design- HTML & CSS, Golang, PHP, Git, Go, Cuda

Other Technologies: OpenCV, LoRA, Transformers, Flask, Flutter, AWS, React, Postgres, PyTorch, NVIDIA Nsights, Tensorflow