ARJUN KULKARNI

arjunkulkarni.co — linkedin — github — arjunpkulkarni@gmail.com

EDUCATION

University of Illinois Urbana–Champaign *May 2026*
B.S. in Computer Science & Materials Engineering *Urbana, IL*
− Relevant Coursework: Data Structures, Algorithms, Database Systems, Applied Artificial Intelligence, Data Mining
− Certifications: AWS Cloud Practitioner, MITRE Embedded Systems, Stanford Supervised Learning, MERN Stack

SKILLS

Languages: Python, Java, TypeScript, JavaScript, C++, SQL, Bash
Infra/Cloud: Kubernetes (EKS), Terraform, Helm, Istio, Cloudflare, Datadog, Linux, Docker, CI/CD
Backend/Data: Spring Boot, Postgres, Redis, DynamoDB, Airflow, AWS, Node.js/Express, FastAPI
Frontend/Testing: React, React Native, GraphQL, Storybook, Radix UI, Vite, Playwright
ML/Automation: Metaflow, HuggingFace, PyTorch, TensorFlow, Pandas, LangChain, RAG

EXPERIENCE

Rumor *Nov 2025 – Jan 2026*
Software Engineer Intern *New York, NY*
− Built NextJS onboarding flows backed by Postgres and AWS, supporting 30k concurrent users over 500 events.
− Designed RBAC with real-time backend updates for 1k+ event hosts, strengthening reliability during a $3M round.

Curator.to *Jan 2024 – Dec 2025*
Founding Engineer *New York, NY*
− First founding engineer; raised $1M, launched AI commerce platform for 4+ enterprises using NextJS, Postgres, AWS.
− Built no-code e-commerce agent framework using LangChain + RAG; powered 2K+ daily queries in production.

AbbVie *Dec 2024 – Jun 2025*
Software Engineer Intern *Chicago, IL*
− Built ETL pipeline for cancer research teams, cutting document wrangling time by 80% for 240k+ docs.
− Optimized FastAPI ingestion + Postgres queries, batching, async workers to boost pipeline 4× for R&D operations.

UCSD Health & Coordinated Science Laboratory *Jan 2025 – Aug 2025*
Software Engineer Intern *San Diego, CA*
− Led DevOps and ML workflows for UCSD-integrated AI dietician platform serving 200+ patients (Prof. Varshney).
− Built subgraph DAG and RAG pipeline with LangGraph, boosting dietary accuracy based off of patient data by 22%.

Beckman Institute *Feb 2025 – Apr 2025*
ML Research Intern *Urbana, IL*
− Built a real-time Django chat platform with WebSockets for dual-user LLM interaction studies at scale.
− Debugged and stabilized multi-user sessions for 40+ subjects, ensuring zero message loss and clean analytics.

Illinois Artificial Intelligence Group *Jan 2024 – Jan 2025*
ML Research Intern *Urbana, IL*
− Integrated RL pipeline into existing MPC framework for autonomous EVs in SUMO, improving accuracy by 25%.
− Achieved 18% lower traffic delay in open-world SUMO simulations by tuning ROS, optimizing C++ control loops.

Civil Newmark Lab *Jan 2024 – May 2024*
ML Research Intern *Champaign, IL*
− Ran 40+ experimental tests over 3 months analyzing carbonation reduction using LC3 cement composites.
− Applied Random Forest models in Python to predict and reduce cement-related CO_2 emissions by 18%.

Illinois Quantum Information Technology Center *Sep 2025 – Nov 2025*
ML Research Intern *Champaign, IL*
− Built a Python pipeline to run and log COMSOL simulations at scale, generating ready training data (Prof. Leburton).
− Implemented simulations for Ionic Coloumb Law to train regression model to increase hardware energy output by 27%.