

SKILLS SUMMARY

- **Languages:** Python, Java, JavaScript, Go (Familiar), Shell/Bash Scripting, C++, SQL, YAML, React, NodeJS
- **Cloud Platforms:** Amazon Web Services (AWS), Google Cloud Platform (GCP), Microsoft Azure, Terraform Cloud
- **Containerization & Orchestration:** Docker, Kubernetes (EKS, AKS), Helm, Istio, Linux, HashiCorp Packer
- **CI/CD & DevOps:** Jenkins, ArgoCD, Azure Pipelines, GitHub Actions, GitOps, SonarQube, Trivy
- **Infrastructure & Automation:** Terraform, Ansible, Chaos Engineering, Incident Management, OOP
- **Monitoring & Observability:** Prometheus, Grafana, CloudWatch, Kiali
- **Collaboration:** Azure DevOps, GitHub, Jira, Scrum, Kanban, Leadership, VS Code

EXPERIENCE

- **AI Research Engineer & Team Lead – Computer Science Dept.** Remote
University of Illinois at Chicago Oct 2025 – Present
 - Maintain a **Linux**-based fuzzing infrastructure using **Docker** and Google FuzzBench – reduced setup time by ~60% and ensure reproducibility across 5+ active benchmarks.
 - Develop and own **Python** statistical tooling the research team relies on to evaluate campaigns and schedule experiments, improving prediction accuracy by 30%+.
 - Manage LLVM build caching on **Linux**, cutting rebuild times by ~70% and handling 100+ GB of generated fuzzing data across ongoing experiments.
- **DevOps & Infrastructure Research Engineer – Business Analytics Dept.** Remote
University of Illinois at Chicago Sep 2024 – Present
 - Lead a team of 5 – responsible for technical direction and delivery of MetARAG, an AI document intelligence platform built on **Python**, LangChain, and OpenAI APIs.
 - Design and maintain a multi-stage **Python** data pipeline (PDF ingestion → chunking → enrichment) with **GPU** acceleration that runs autonomously, improving throughput by ~65%.
 - Oversee LLM evaluation workflows on **GCP**, monitoring retrieval accuracy and metadata consistency across 4+ active document corpora used by faculty researchers.
- **Teaching Assistant – Engineering & Business Administration** Hybrid
University of Illinois at Chicago Sep 2025 – Present
 - Support 60+ graduate students across systems, infrastructure, and analytics courses – responsible for office hours, grading, and lab sessions on **Linux**, networking, **Python**, and distributed systems.

PROJECTS

- **Movie Recommendation System – MLOps, CI/CD, Responsible AI:**
 - Deployed a recommendation service on **Linux** using **FastAPI** and **Docker** (SVD++, KNN), with a full **CI/CD** pipeline via **Jenkins** and **ArgoCD** – achieved RMSE 0.58 and 65% faster inference.
 - Wired **Prometheus** and **Grafana** dashboards for drift detection and retraining; added A/B testing, rate limiting, and bias detection across a 6-person Agile team.
- **E2E Encrypted Messaging App – MTPROTO 2.0:**
 - Implemented Telegram’s MTPROTO 2.0 in **Python** – AES-256, SHA-256, Perfect Forward Secrecy – with multi-layer transport (TCP, WebSocket, HTTP/HTTPS), full message serialization, and session management.
- **AI-Powered Digital Fraud Detection:**
 - Built a multi-agent **Python** system for real-time fraud detection, analyzing transaction patterns and behavioral anomalies using collaborative AI agents and ML classifiers.

EDUCATION

- **University of Illinois at Chicago** Chicago, IL
M.S. Computer Science — GPA: 3.8/4.0 Aug 2024 – May 2026 (Expected)
- **Jain University** Bangalore, India
B.Tech. Computer Science — GPA: 3.91/4.0 2020 – 2024

PATENTS & LEADERSHIP

- **Patent No. 202341071153 (Nov 2023):** AI-enabled RFID library management system using camera-based access control and intelligent user identification.
- **Graduate Student Council Rep. – CS Dept., UIC (Aug 2025 – Present):** Represent 200+ CS graduate students; coordinate with administration on research funding and departmental policy.