

SHAGUFTA ANJUM

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EDUCATION

University of Illinois Urbana-Champaign

Illinois, USA | Jan 2024 - April 2025

Master of Computer Science

GPA: 4/4

Courses: Applied Machine Learning, Cloud Computing, Distributed Systems, Large Language Models, Computer Vision, Data Mining, Human Computer Interaction

Mahindra University

India | July 2019 - May 2023

Bachelor of Technology, Computer Science Engineering

GPA: 3.95/4

EXPERIENCE

Cognida.ai

Sunnyvale, CA, USA

Software Engineer, Applied AI

Jan 2026 – present

- Architected a persistent context graph for enterprise AI agents, synthesizing data across various sources into interconnected, source-grounded context
- Designed context retrieval architectures combining vector search and graph traversal and ingestion workflows for evolving enterprise context
- Built AI-native automation workflows for finance and legal operations, translating ambiguous customer processes into production-grade systems
- Engineered reliable LLM pipelines with schema-constrained outputs, deterministic validation, confidence-based escalation, and human review paths
- Developed full-stack products spanning backend services with Django and REST APIs, external integrations, and frontend interfaces
- Worked directly with customers & functional teams to define requirements, evaluate technical tradeoffs and own solution development end-to-end

Amazon

New York, NY, USA

Software Engineer

June 2025 – Dec 2025

- Built a Bulk User Management system for Amazon Ads, replacing manual operations with batch workflows across thousands of customer accounts
- Developed scalable Spring Boot services for high-volume user operations with hierarchical authorization and access-control enforcement
- Built parallel batch-processing pipelines with failure isolation, status tracking, and observability for large-scale distributed operations
- Designed an algorithm to reduce authorization latency by enforcing account-hierarchy depth constraints, using cached derived graph state in Redis
- Introduced AWS AppConfig-based runtime controls ahead of a major launch, enabling gradual customer rollout and rollback without redeploying

GlobalLogic Inc.

Santa Clara, CA, USA

Software Engineer Intern

June 2024 – July 2024

- Built a real-time competitive quiz experience for a production learning platform, working end-to-end across product, frontend, and backend system
- Developed React and Node.js services for live quiz coordination, dynamic leaderboards, user management, and role-based administration
- Identified repeated data access as a performance bottleneck and introduced Redis-based caching to reduce backend load and improve latency
- Integrated Google SSO using OAuth 2.0 and JWT-based role controls for authenticated and role-specific platform access
- Automated build and deployment workflows using GitHub Actions and Docker to support faster, more reliable feature delivery

Dell Technologies

Bengaluru, India

Software Engineer

July 2023 – Dec 2023

- Built a computer vision system for detecting packaging-label defects from real-world factory image data captured by edge devices
- Developed Python inference services for image preprocessing, defect classification, and result publishing in a production manufacturing workflow
- Designed an event-driven Kafka pipeline to ingest image metadata, distribute inference work, and publish prediction events to downstream systems
- Deployed and operated containerized ML services on AWS, supporting real-time quality alerts and manufacturing visibility

PROJECTS

Personalized Stylistic Text Generation with PEFT & RAG

Sep 2024 – Dec 2024

- Applied LoRA finetuning and retrieval augmented generation to generate personalized text aligned with user preferences using open-source models
- Built the LLM pipeline for instruction synthesis, 4-bit quantized fine-tuning, semantic retrieval and evaluation across multiple writing domains

Ball Action Tracking in Soccer Videos

Jan 2025 – April 2025

- Built a CNN-Transformer video understanding model to localize and classify soccer ball actions such as passes and drives from match footage
- Engineered the video processing pipeline across frame extraction, temporal windowing, annotation alignment, model training and evaluation

SKILLS

- Programming Languages: Python, Java, JavaScript, Typescript, SQL
- Web Development: React.js, Django, Angular, Node.js, Spring Boot, Flask, FastAPI, MCP
- Databases: MongoDB, MySQL, PostgreSQL, DynamoDB, Redis, Pinecone
- Machine learning: PyTorch, TensorFlow, Scikit-learn, Pandas, Huggingface, Computer Vision, NLP, Finetuning, RAG
- Cloud and DevOps: AWS, GCP, Docker, Kubernetes, CI/CD, GitHub Actions, Kafka