

EDUCATION

Texas A&M University - College Station Aug'24 - May'26
M.S. in Computer Science GPA: 4.0/4.0
Coursework: Artificial Intelligence (AI), Algorithms, Operating Systems, NLP, Network Security, Programming LLMs

Indian Institute of Technology (IIT) Kharagpur Jul'17 - May'22
B.Sc. + M.Sc in Economics with Minor in Mathematics & Computing GPA: 8.89/10
Coursework: Probability and Statistics, Database Systems, Optimization Methods, Machine Learning, Econometrics

SKILLS

Programming Java, C++, Python, SQL, React, GraphQL
Libraries Kubernetes, Apache Kafka, Spring Boot, NumPy, Pandas, TensorFlow, Junit & Mocha
Software and Tools Git, Cosmos DB, Grafana, Microsoft Azure, Google Cloud Platform (GCP), Linux, Jenkins

WORK EXPERIENCE

Teaching Assistant, Cloud Computing, Texas A&M University Aug'25 - Present
• Supported instruction for cloud concepts and labs on virtualization, distributed systems, and AWS cloud architecture

Software Developer Intern, Paycom May'25 - Aug'25
• Designed a GraphQL API over a CRM system handling 20k+ RPS, reducing endpoint sprawl and streamlining data access
• Modeled key CRM entities using Entity Framework in C#, enabling flexible, type-safe and client-driven queries
• Achieved 40% reduction in payload size and improved dev team efficiency by a unified and scalable GraphQL interface

Software Engineer, Walmart Global Tech Jul'22 - Jul'24
System Integration and Infrastructure Development for Mexico e-Commerce using Java
• Implemented an app authentication layer via service registry and service mesh for rate limiting and access control
• Leveraged JMX automation testing and integrated Dynatrace for reducing system latency and bottleneck identification
Performance improvement for Pricing application
• Optimised read & write transactions on NoSQL CosmosDB calls to reduce calls by 23% & mitigate database throttling
• Configured canary deployment on Kubernetes pods to enhance API stability with metrics for early issue detection
• Achieved 4x increase in ingestion speed by optimizing RUs & threads, introducing batching & increasing Kafka partitions
Legacy Framework Migration from Spark to Spring Boot
• Reduced cloud costs by 30% by migrating pricing services to Kubernetes-based Walmart's cloud native platform
• Developed a utility to sync stale data from the legacy Oracle DB to the current Cosmos DB for efficient migration

Software Intern, Walmart Global Tech May'21 - Jun'21
• Designed and built a price drop detection feature in Java and Spring Boot to assist sellers on the platform
• Performed high and low level design, along with crafting technical specifications, resulting in an 80% Junit test coverage
• Built an alerting and monitoring utility solution for price drop alerts in Python and added Swagger for API detailing

Data Analyst Intern, Tydy Dec'19 - Jan'20
• Built a productivity monitoring dashboard tool using time series activity data & enhanced onboarding experience
• Used K-means clustering to boost app engagement by 20% through optimized notification timings

PROJECTS

Recommendation System for Student Organizations | Texas A&M University Feb'25 - Mar'25
• Automated the data scraping and analysis process using Python, Selenium, and BeautifulSoup for information retrieval
• Designed a hybrid BM25 and SBERT recommender for 1,200+ TAMU clubs, cutting discovery time by 80%
• Developed full-stack system with React frontend, FastAPI backend, MongoDB and NLP-based classification

Analyzed Human-Bot Interactions and Online Information Dynamics | University of Calabria, Italy May'19 - Jun'19
• Analyzed 0.6M X (Twitter) interactions to study bot vs. human behavior and their impact on political discourse
• Improved the effectiveness of decision tree classifier by 10% to classify X accounts as operated by bots or humans

ACTIVITIES

- **AI Category Winner, Walmart Techathon 2023:** Developed an NLP-based review system, optimizing backend for scalability and security, projected to save 125M hours/year and boost revenue by \$330M/year
- **Curator, TEDxIITKharagpur 2020:** Led a 24-member team and managed a budget of \$10k for the event