AKSHAT PUNJABI

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Objective

Pragmatic computer scientist passionate about building adaptive systems that solve today's challenges and anticipate future needs. Specializing in AI-driven optimization, cybersecurity, and cloud-native solutions for high-performance systems.

Education

Texas A&M University | GPA: 4.00 August 2023 – May 2025
Master's in Computer Science
Coursework: Software Engineering, Deep Reinforcement Learning, Cybersecurity Risk, Distributed Systems, Network Security

MIT Manipal | GPA: 3.64 July 2019 – May 2023
Bachelor's in Computer Science (Minor specialization: Computational Intelligence)

Technical Skills

Programming & Scripting: Python, C/C++, Java, Swift, Dart, C#, JavaScript, HTML/CSS, PHP, Regex
DevOps & Automation: Git, Docker, Selenium, Postman, CI/CD, Vertx, large-scale ETL, MLFlow, DsPy
Cloud Platforms & Databases: GCP, AWS, Azure, Azure ML, MongoDB Atlas, Redis, NoSQL, SQL, JSON, XML
Machine Learning: Pandas, Matplotlib, Seaborn, Power BI, Tableau, NLTK, OpenCV, HuggingFace, Ollama, Langchain
Frameworks & Libraries: React, JUnit, Angular, .NET, TensorFlow, PyTorch, Keras, Spring Boot, Flutter, SwiftUI, Firebase

Work Experience

Texas A&M University December 2023 – Present
Graduate Researcher
- Led cybersecurity research to develop a two-tier antivirus system, reaching 96.8% accuracy & <2% false positives.
- Engineered a DLL injection-based monitoring tool to intercept 157 system calls & log ~920K process events.
- Presented findings & coordinated with peers, reducing detection latency to under 1.5 seconds.

Oracle January 2023 – July 2023
Software Engineering Intern
- Managed Business Intelligence services, increasing BI API dependability & simplifying troubleshooting.
- Refactored POS system's synchronization pipeline, reducing inventory mismatches by 20% across 72 locations.
- Proposed an automated test script for scheduled exports, saving 12 hours weekly by eliminating manual testing.
- Fixed a critical DST bug affecting 8,000+ users, reinforcing stakeholder confidence in reporting accuracy.

Amazon June 2022 – July 2022
Amazon ML Summer School
- Partnered with a team of top applicants & industry experts to upgrade AI training workflows.
- Analyzed 500K+ data points to build predictive models, enabling early intervention for at-risk individuals.
- Boosted machine translation by 5 BLEU points via experimentation, enhancing cross-language communication.

Projects (Links Included)

Agentic Virtual Teaching Assistant February 2025
- Earned Boston University approval, providing instant academic support across 50+ syllabus topics.
- Collaborated with cross-functional team to engineer RAG chatbot, accelerating response time & engagement.
- Deployed on AWS EC2, incorporating fine-tuned LLMs & time-gated filters to maintain inference quality above 99%.

ReLeaf - TAMUhack X 2024 January 2024
- Delivered a high-impact pitch, claiming 1st position out of 800+ participants & drawing post-event interest.
- Formulated blockchain-powered fundraising platform, utilizing smart contracts with DeFi for secure donations.
- Guided the team through a high-pressure environment, maintaining momentum and delivering winning results.

GraphNAS optimization using RL December 2023
- Attained 33% performance gain in optimal graph neural network design for large-scale data analysis.
- Conducted research into reinforcement learning methods (PPO, TRPO) for optimizing Neural Architecture Search.

Manipal Locals App July 2021
- Launched an Android app for centralizing university resources, attracting over 500 daily active users.
- Gathered student feedback to refine features, leading to 1,200 downloads & improved satisfaction in first month.