Harsh Tita

(480)-304-2231 — harshtita01@gmail.com — linkedin.com/in/harsh-tita/ — github.com/iamharshtita — iamharshtita.github.io/harsh-portfolio/

SUMMARY

Computer Science MS student at Arizona State University focused on backend systems, distributed computing, and generative AI. Skilled in designing scalable ETL pipelines and building LLM-powered, agentic AI systems using Python, Golang, SQL, and AWS (Bedrock, Lambda). Seeking a Summer 2026 Software Engineer or AI Engineer internship to work on production-scale AI systems.

EDUCATION

Arizona State University Tempe, Arizona, USA
Master of Science, Computer Science (GPA: 4.0/4.0) Expected May 2027
Coursework: Distributed Database Systems, Semantic Web Mining, Knowledge Representation and Reasoning, Data Mining

Amity University Kolkata, India
Bachelor of Technology, Computer Science and Engineering (GPA: 8.64/10.0) Jul 2019 – Jun 2023
Coursework: Data structures and Algorithms, Software Engineering, Pattern Recognition, Database Systems, Cloud Computing

TECHNICAL SKILLS

Programming Languages: Golang, Python, C/C++, Java, Javascript, SQL
Frameworks/Libraries: React, Angular, PyTorch, TensorFlow, Scikit-Learn, Numpy, Pandas, Spark, Golang Gin, AWS Boto3
Data/Cloud: PostgreSQL, MongoDB, CockroachDB, Kafka, Hadoop, ETL, AWS (S3, EC2, EMR, Bedrock, Agentcore, Lambda)
Tools/Platforms: Docker, Kubernetes, Gitlab, Hugging Face

WORK EXPERIENCE

ASU AI Cloud Innovation Center (powered by Amazon Web Services) Scottsdale, Arizona
-AI Full-Stack Developer (Part-time) Jan 2025 – Present

- Designing and deploying **agentic AI systems using AWS Bedrock, AgentCore, and Lambda**, including RAG-based architectures that integrate foundation models with document ingestion, retrieval layers, and vector search for grounded responses.
- Building serverless, production-ready AI backends using **AWS services (Lambda, API Gateway, S3)**, applying best practices in prompt engineering, model orchestration, and evaluation to improve response quality, latency, and reliability.
- Collaborating with cross-functional teams to translate real-world education, government, and nonprofit problem statements into scalable full-stack AI solutions, balancing system performance, security, and cloud cost efficiency.

ZS Associates Pune, India
-Software Engineer Nov 2023 – Jun 2025

- Contributed to a cloud-backed full-stack application with an **Angular SPA frontend and Python-based backend services**, initially displaying metrics across modular UI components; later extended the system with a **GenAI-driven** summarization pipeline deployed on **AWS EC2**, transforming raw metrics into concise, structured insights for users.
- Engineered automated data validation pipelines using **Python and SQL**, reducing manual QA effort by **80%** and improving operational efficiency across multiple data sources.
- Developed scalable ETL workflows leveraging **Hadoop and AWS EMR** for distributed processing, ensuring reliability and speed in large-scale data transformations.
- Collaborated with client data teams (a leading pharma company) to troubleshoot data quality issues, generate **SQL**-based insights, and deliver accurate business metrics.

TechMojo Solutions Hyderabad, India
-Member of Technical Staff Jun 2023 – Nov 2023

- Built and optimized a scalable **microservice in Golang** by developing REST APIs and **upgrading** it to the latest Golang version, improving system performance and aligning with client requirements.
- Reduced backend load time **by 30%** by optimizing data ingestion from **Kafka**, enhancing system efficiency and performance.

PROJECTS

Stance Detection with Large Language Models (LLMs) Nov 2025

- Fine-tuned state-of-the-art LLMs (**Phi-3 Mini**, **Mistral 7B**, **Llama 3.1 8B**) on the SemEval-2016 dataset for stance detection tasks.
- Implemented Parameter-Efficient Fine-Tuning (PEFT) using **LoRA** and advanced **prompt engineering** techniques to optimize model performance on limited compute.
- Achieved a best-in-class accuracy of **80.02%** with the fine-tuned Mistral 7B model, outperforming baseline approaches.

Cafe Management System (A CRUD Application) Jul 2023

- Led the development of a Restaurant Management System microservice using **Golang**, implementing User Authentication, Role-based Access Control, and RESTful APIs for menu management.
- Utilized **PostgreSQL** for data storage and retrieval, ensuring reliability and performance in handling food item CRUD operations.
- Built an authorization middleware, to safeguard privileged endpoints.