

Niharika Adari

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EDUCATION

University of South Florida: Bachelor of Science in Computer Science

Tampa, FL

- USF GPA: 3.97/4.0 : *Summa Cum Laude*
- Vice President: Women in Computer Science Club (WiCSE)

December 2024

EXPERIENCE

Citibank, N.A

Tampa, FL

Digital S/W Eng Intm Analyst, Officer of AML Systems

January 2025-Present

- Core contributor to the AWS cloud migration for Citi's global Sanctions Risk Management application, successfully migrating 10 out of 20 production-grade mission-critical microservices to EKS with Aurora PostgreSQL by containerizing services, and configuring pod level networking.
- Accomplished enterprise data-pipeline modernization by contributing to migration of 4,200+ database objects to Aurora PostgreSQL by rewriting incompatible PL/SQL logic, rebuilding ORM mappings, and validating data fidelity across systems, ensuring PostgreSQL/Oracle Compatibility
- Independently resolved 65% of all cloud-migration defects (15+) within a two-month period.
- Engineered a production-adopted outbox architecture producing sequence diagrams that identified failure points, defined fallback logic, and established a robust cloud-ready architecture.
- Developed and expanded automation test suite coverage across 389+ cases, unblocked CI failures, and strengthened pipeline reliability.

USF SEES Lab- Specification Mining

Tampa, FL

Research Assistant, Contributor to NSF-funded project

January 2024- December 2024

- Developed preprocessing pipelines for extracting and organizing candidate message-flow patterns from System on Chip communication traces, including causality-structure extraction and pattern transposition.
- Engineered a pattern-evaluation and ranking pipeline, including acceptance-ratio computation and validation engine; accelerated throughput by 14x through multithreaded batching and pruning heuristics.
- Designed and optimized a generalized pattern-removal algorithm capable of eliminating variable-length sequential patterns from large execution traces, achieving a 400× speedup through hash-table indexing, pointer-based traversal, and elimination of quadratic list mutations.

USF Teacher Assistant- Data Structures

Tampa, FL

Student Assistant

August 2024-December 2024

- Provided 10 hours per week of academic support, assisting the professor with grading exams and offering individualized help to students, including answering questions and clarifying C++ concepts.

PROJECTS

AI-Powered Study Assistant: Desktop Application: Studykeet

- Developed a desktop application using Electron, React, and Chakra UI, enabling users to summarize or query multimedia content, or apply the Feynman Technique with AI-powered feedback.
- Implemented a FastAPI backend integrated with LLMs and Whisper for real-time analysis of user explanations, providing feedback on content coverage, accuracy, and study material comprehension.

HONORS AND AWARDS

- **Dean's List:** Earn semester GPA of 3.90 while taking 12 credits, for 4 semesters Fall 2021- Spring 2023
- **USF Presidential Award:** Highest merit award based on academic excellence throughout high school

ADDITIONAL

Technical Skills: Python, Java, C/C++, SQL, JavaScript, HTML/CSS, R; AWS (EKS, Aurora PostgreSQL), Docker, Kubernetes, OpenShift; PostgreSQL, Hadoop; Spring Boot, React, Flask, Electron; NumPy, pandas, scikit-learn, TensorFlow, PyTorch, Matplotlib, Seaborn, Plotly; Selenium, Cucumber BDD, BeautifulSoup