Shri Harish Saravanan

✉ shriharish@tamu.edu 📞 +1 657-558-1379 📍 College Station, TX in [LinkedIn](#)

Professional Summary

Computer Engineering graduate student with hands-on experience in backend automation, API development, and data pipelines using Node.js, Python, SQL, and cloud technologies. Skilled in debugging distributed systems, improving performance, and building scalable microservice workflows through internships and project work. Strong foundation in full-stack development, CI/CD, and data engineering.

Work Experience

Software Engineer – Accolite Digital   *July 2024 – July 2025 | Karnataka, KA*

- Developed backend automation workflows in Node.js for complex login, authentication, and user-management flows across 5+ enterprise microservices, increasing system reliability by 30%.
- Designed 10+ modular RESTful APIs and internal utility libraries, improving code reuse and reducing duplication across test suites by 40%, which boosted development efficiency.
- Diagnosed and resolved 100+ backend failures using advanced debugging and problem-solving techniques (HAR tracing, network logs, root-cause analysis); collaborated with backend engineers to refine API contracts and improve service reliability by 25%.
- Created diagnostic tools and automated end-to-end mapping flows to overcome race conditions affecting ~20% of runs, reducing manual intervention and increasing test reliability by 50%.
- Reduced regression test execution time from 3–4 hours to under 10 minutes, improved defect detection by 35%, and actively participated in sprint planning and cross-team collaboration to align development with business goals.
- Managed daily workflow by reviewing Jira tickets, triaging CI pipeline failures, collaborating with QA, backend, and product teams, and documenting changes linked to Jira stories.

Data Engineering Intern – Accolite Digital   *Jan 2024 – June 2024 | Karnataka, KA*

- Built and optimized ETL pipelines using Python, SQL, Snowflake, and Databricks, automating data ingestion and transformation workflows across multiple datasets.
- Improved data processing throughput by 40% and reduced query execution time by 30% through warehouse tuning, partition optimization, and caching strategies.

Education

TEXAS A&M UNIVERSITY – College Station, TX   *2025-present*
Master of Science in Computer Engineering

Relevant Coursework: Parallel Computing, Operating Systems, Computer Architecture, Software Reverse Engineering

MADRAS INSTITUTE OF TECHNOLOGY, ANNA UNIVERSITY – Chennai, TN   *2020-2024*
Bachelor of Engineering in Electronics and Communication

Awards: First Class with Distinction
Relevant Coursework: Data Structures, Python Programming, Cloud Computing, Computer Networks

Skills

Languages: Java, Python, C/C+, JavaScript, React, HTML/CSS, MATLAB, Verilog, TypeScript, Bash
Databases: MongoDB, MySQL, Snowflake, Databricks
Tools: Git, Scikit, AWS, Jenkins, Jira, Confluence, Postman, Figma
ML/AI Frameworks: PyTorch, Hugging Face Transformers, Scikit-learn, NumPy, Pandas
Frameworks & Libraries: Puppeteer, Playwright, AVA, OpenAPI, FastAPI, Requests library

Projects

Snowflake Data Accelerator   *May 2024 – June 2024*

- Led the end-to-end API integration for a Snowflake Data Connector, leveraging Python, FastAPI, and OpenAPI Spec to build scalable and secure data access workflows. Implemented robust RBAC and CDC mechanisms, enhancing data security and real-time synchronization.

Deep Learning Enhanced RIS Configuration for Urban Scenario   *June 2023 – Dec 2023*

- Designed a Reconfigurable Intelligent Surface (RIS) system using AlexNet-based deep learning to enhance wireless communication. Implemented sparse active sensors for efficient channel estimation, reducing training data requirements by 86% while achieving optimal data rates. Simulated using the DeepMIMO dataset.