

Madhav Suri

(214) 208-3176 | Surimadhav06@gmail.com | [linkedin.com/in/madhav-suri](https://www.linkedin.com/in/madhav-suri) | github.com/madhav-suri

EDUCATION

The University of Texas at Dallas

Bachelor of Science in Computer Science and Mathematics

- **Relevant Coursework:** Data Structures and Algorithms, Object-Oriented Programming, Discrete Mathematics, Database Systems, Software Engineering, Operating Systems
- **Certifications:** AWS Cloud Practitioner, Google Project Management Certificate, CAPM (In Progress)

Richardson, TX

Expected December 2027

SKILLS

Languages: Python, Java, JavaScript, TypeScript, C++, Dart, SQL, Bash, Go, HTML, JSON

Frameworks/Tools: React, Next.js, Node.js, REST APIs, Git, Firebase, PostgreSQL, Docker, Kubernetes, Jenkins, Linux/Unix, AWS, Tableau, Power BI, Matplotlib, Excel VBA

Concepts: Data Structures and Algorithms, Object-Oriented Programming, Full Stack Development, API Design, Cloud Computing, Microservices, CI/CD, Unit Testing, Agile/Scrum, Version Control, Containerization, Debugging, Scalable Systems, Data Visualization, Machine Learning, Business Process Automation

EXPERIENCE

Frontend Developer

January 2026 – Present

ACM UTD

Richardson, TX

- Engineered the frontend for **D.I.Y.A.**, a full-stack academic support platform with **5+** core workflows including office-hour scheduling, forum-based Q&A, self-check grading, and professor analytics using **React**, **Next.js**, and **TypeScript**.
- Built reusable, component-driven interfaces for students, TAs, and professors across authentication, dashboards, analytics pages, and AI-assisted support flows, improving maintainability across **2** primary user experiences.
- Integrated dynamic frontend views with backend **REST APIs** to support real-time workflow updates, conditional UI states, duplicate-question detection, and modular full-stack product development in a Git-based Agile environment.

Software Engineering Intern

June 2025 – July 2025

SoftBank Robotics America

Southlake, TX

- Diagnosed firmware, wiring, and sensor-related issues across **10+** NAO robotic systems, applying structured debugging, subsystem validation, and technical troubleshooting to improve reliability of production hardware systems.
- Supported firmware deployment, sensor integration checks, hardware bring-up, and validation workflows while documenting repeatable testing procedures for **4** team members to improve engineering consistency.

Data Analyst (Part-Time)

June 2024 – August 2024

Riddell

Irving, TX

- Built Python and Excel VBA workflows to process **5,000+** helmet impact sensor readings per session, reducing manual data preparation time by **35%** and improving dataset accuracy by **28%**.
- Created data visualizations and weekly dashboards using **Matplotlib**, Excel, and Tableau to surface performance trends, validate sensor outputs, and support data-driven engineering decisions during product testing.

PROJECTS

RiskOS AI | *FastAPI, React, TypeScript, SQLAlchemy, ML, RBAC*

[Live](#) | [GitHub](#) | 2026

- Built a **full-stack fintech fraud operations console** simulating transaction risk review, investigation queues, rule-based scoring, ML-assisted prediction, notifications, and audit-focused workflows.
- Implemented a hybrid risk engine with **deterministic fraud rules**, **machine-learning scoring**, RBAC, permission-gated overrides, seeded demo mode, backend cold-start fallback, and **100+ automated tests**.

RepoPulse Agent | *Next.js, TypeScript, GitHub API, OpenAI API*

[Live](#) | [GitHub](#) | 2026

- Built an **AI codebase intelligence platform** that loads GitHub repositories, maps architecture, answers repo questions, plans changes, reviews diffs, tracks agent runs, and generates engineering reports.
- Engineered a safe agent workflow with **change planning**, **diff verification**, human approval gates, file ranking, task classification, path validation, sandbox-ready verification, Vercel deployment, and **200+ passing tests/build checks**.

D.I.Y.A. Academic Support Platform | *React, Next.js, TypeScript, REST APIs*

ACM UTD | 2026

- Engineered frontend workflows for **D.I.Y.A.**, a full-stack academic support platform supporting office-hour scheduling, forum QA, self-check grading, professor analytics, and AI-assisted student support.
- Built reusable interfaces across authentication, dashboards, analytics pages, and role-specific student/professor experiences while integrating backend **REST APIs** for workflow updates and duplicate-question detection.

LEADERSHIP AND ACTIVITIES

Research Team Lead – URAP

Jan 2026 – July 2026

Undergraduate Research Assistant Program (Prof. Yi Ding), UT Dallas

Richardson, TX

- Led technical research work involving **LLM applications**, sensor data, and real-world analysis, coordinating project execution, implementation tasks, documentation, and research deliverables across a student team.
- Supported applied machine learning research in **efficient AI systems** and **cross-domain human activity recognition**, focusing on practical deployment, experimentation, and scalable AI-driven solutions.
- Strengthened technical skills in **Python**, experimentation, implementation, and machine learning workflows while communicating progress, blockers, and findings under Prof. Yi Ding.
- Presented preliminary research findings at the Capital of Texas Undergraduate Research Conference (CTURC 2026) at UT Austin.