Sri Varsha Vattikuti

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EDUCATION

University of Texas at Dallas

Richardson, TX

Aug. 2023 - May 2026

B.S. Computer Science

Achievements: Academic Excellence Scholarship

Relevant Coursework: Computer Science I/II, Discrete Mathematics I/II, Linear Algebra, Probability and Statistics, Computer Architecture, UNIX Programming, Data Structures and Algorithms, Artificial Intelligence, Digital Logic and Computer Design, Software Engineering, Programming Language Paradigms

EXPERIENCE

Jaaji Technology

Remote

AI/ML Intern

Dec. 2024 – Jan. 2025

- Designed and implemented a **Flask-based API** to analyze and highlight anomalies between two different images using **computer vision techniques** for factory workers to detect changes in machinery
- Leveraged FastSAM image segmentation to extract ROIs and OpenCV for image preprocessing for
- Integrated ORB to detect key points and match features between images using BFMatcher

The University of Texas at Dallas - Computer Science Department

Richardson, TX

Student Grader

Sept. 2024 – Present

- Graded assignments and proctored exams for **Professional Responsibility** in Computer Science and Software Engineering (CS3162)
- Attended weekly meetings to review course logistics and maintain professional expectations and provided support and guidance to students

NSF Research Experience for Undergraduates - Dr. Cesar Torres and Dr. Mehdi Farahbahksh

Arlington, TX

Researcher

May 2024 - Aug. 2024

- Selected out of 1000+ candidates for a research program funded by the **National Science Foundation**.
- Completed a 10-week undergraduate research training program with weekly paper and project presentations, makerspace equipment training workshops, and technical writing and research documentation workshops.
- Leveraged **openSCAD** to develop an algorithm that analyzes SVG files and generates corresponding **3D models** suitable for inverse slip casting mold creation.
- Used the **Agile methodology** to design the software and documented each step in a professional-level **research paper** submitted to the TEI Conference

The Tutoring Center

Tutor

Flower Mound, TX

Jan. 2022 - Aug. 2023

- Provided comprehensive tutoring services for K-12 students in English, writing, phonics, and mathematics.
- Effectively managed **student schedules** to ensure timely and efficient tutoring sessions.
- Developed personalized learning strategies tailored to each student's unique needs and strengths, fostering academic growth and confidence.

ACTIVITIES & PROJECTS

HackUTD Ripple Effect

Richardson, TX

FronTIER

Nov. 2024 - Nov. 2024

- Designed and developed the user interface (UI) for an iOS app in Xcode using Swift, ensuring a seamless and engaging user experience tailed to address customer needs
- Collaborated on integrating real-time augmented reality (AR) product visualization using Apple's ARKit and RealityKit, enabling users to preview products in real-world environments
- Supported the implementation of a **Neural Collaborative Filtering model** for personalized product recommendations, achieving an **AUC-ROC of 91%** and **F1-Score of 80%**, based on customer data and product catalogs provided by Frontier Communications

HackFin Quantum Drift

Richardson, TX

TerraTrust

Nov. 2024 – Nov. 2024

- Developed a comprehensive risk assessment iOS app using Swift and Xcode to evaluate land viability for home building in Texas
 counties
- Developed a custom neural network model to accurately assess risk factors (environmental, crime, economic) and generate a risk score (0-100)
- Integrated Apple MapKit to provide an intuitive user interface for interactive mapping and location-based analysis
- Awarded 3rd place in the Lennar track

HackUTA 6
MindMosaic

Arlington, TX

- Developed an iOS app in XCode using Swift, utilizing Firebase for authentication, and an integrated API for sudoku activity
- Featured journaling, drawing prompts, and three games (Sudoku, Anagrams, Flashcard Match) to enhance critical thinking, memory
 recall, and motor skills, with research based activities and colors proved to enhance brain stimulation

HackUTD Richardson, TX

Hackathon Team Member

Nov. 2023 - Nov. 2023

- Developed a comprehensive **insurance recommendation platform** to assist small business owners in selecting the most suitable insurance policies based on their specific needs and risk profiles.
- Implemented a proprietary risk assessment tool that accurately evaluated a company's financial vulnerability and provided tailored recommendations to mitigate risks and reduce insurance costs using a GPT Chatbot.
- Awarded 1st place in the State Farm track and 3rd overall.

ACM Projects - UTD

Michelin Archives

Richardson, TX

Sept. 2023 - Nov. 2023

- Designed and developed a cutting-edge recipe management mobile app that leverages optical character recognition (OCR) technology to digitize handwritten recipes.
- Built a robust backend infrastructure using Firebase and Google ML Kit to ensure efficient data storage, retrieval, and analysis.
- Successfully presented the project to industry professionals, showcasing its innovative features and potential applications.
- Achieved recognition by securing 3rd place out of eleven competing projects.

HackTable Flower Mound, TX

Hackathon Team Member

Nov. 2020 – Nov. 2020

- Created a real-time wildfire tracking application featuring an interactive map, integrated news feeds, and personalized wildfire alerts for residents in high-risk regions.
- Presented product to multiple judges who are professionals in the software engineering industry.
- Achieved recognition by winning 1st place in the California Wildfires category.

TECHNICAL SKILLS AND CERTIFICATIONS

- Skills: Java, HTML, C++, GO, Mobile App Development, Rhino/Grasshopper
- Certifications: Microsoft Office Certification(2022)