

Sai Peram

McKinney, TX • (919) 432-2097 • stp874@eid.utexas.edu

[LinkedIn](#) • [GitHub](#) • [Portfolio](#)

Education

Bachelor of Science in Electrical and Computer Engineering (Transfer Junior from UT Dallas)

Spring 2027

The University of Texas at Austin, Austin, TX

GPA: 4.000 (*Dean's List from UT Dallas*)

Relevant Coursework: Data Structures and Algorithms, Computer Science II, Electrical Network Analysis, Digital Circuits, Calculus II/III, Differential Equations, Discrete Math, Linear Algebra, Physics: Mechanics & Electricity and Magnetism, Probability and Statistics

Research Interests

Embodied AI, Robot Learning, Computer Vision, Perception-Action Loops, Multi-modal Fusion, Deep Learning, Reinforcement Learning, Simulation-to-Real Transfer

Software Skills

Programming Languages: Python, Java, C, C++, HTML, CSS, JavaScript, Dart, Swift, R, GoLang, SQL, C#, Haskell, TypeScript

Technical Skills: AWS (Connect, Lambda, S3, Bedrock, and Lex), Docker Containerization, Kubernetes, ROS2 (Robot Operating System 2), Arduino, Google Big Query (Qwik Start, Datasets, Machine Learning), PyTorch, TensorFlow, MATLAB, Flutter SDK, Firebase, Office 365, Git, SimpleITK, NoSQL, NodeJS, Slack, Kotlin, Excel, Jenkins, PHP, CAD

Certifications: Microsoft Azure AI Fundamentals, Google AI Essentials, Mobile Application Development from The University of Waterloo, Java Programming and Intermediate Programming from The University of Waterloo, Agentic AI, IT Essentials from Cisco

Industry Experience

AI/ML Engineer Internship – [Resolve Tech Solutions Inc.](#), Addison, TX

May 2025 – Present

- ❖ Developing a real-time call center support system that leverages AWS Connect, Lambda, S3, Athena, and QuickSight for evaluating IT Operator metrics
 - ❖ Improving customer experience by integrating ServiceNow into a Streamlit web application for real-time incident tracking
 - ❖ Automating metric based workflows for reducing bottlenecks and enhancing IT customer support systems
-

Research Experience

Undergraduate Research Developer – *NOVA: Autonomous Driving Lab, UT Dallas*

Aug 2024 – Present

- ❖ Enhanced autonomous vehicle systems using ROS2 for node-based communication and Docker for containerization
- ❖ Integrated computer vision models like YOLOv8 for real-time AI processing of accurate detection and analysis of car brake lights using Linux based platforms like Ubuntu
- ❖ Trained a Long-Short Term Memory network to anticipate the future movement of obstacles in unfamiliar environments for dynamic occupancy grid prediction

AI Project Lead – *The Artificial Intelligence Society, UT Dallas*

January 2025 – May 2025

- ❖ Led the development of an AI driven solution using deep learning and medical imaging to detect eye diseases
- ❖ Managed source code repositories using Git, ensuring an effective collaboration, version control, and integration of AI

Medical Image Analysis AI Developer – *The Artificial Intelligence Society, UT Dallas*

September 2024 – December 2024

- ❖ Used PyTorch and TensorFlow to train ResNet-50 and U-Net models to diagnose lumbar spine degenerative conditions from MRI scans
 - ❖ Earned 1st place recognition by academic and industry professionals for contributions in medical image analysis
-

Leadership and Teaching Experience

President – *UTDesign Makerspace, UT Dallas*

May 2024 – May 2025

- ❖ Took initiative in organizing robotics and engineering workshops over 3 months, engaging 100 undergraduate students
- ❖ Directed team logistics, technical planning, and hardware kits preparation

AI Track Lead – *Theta Tau Alpha, UT Dallas*

January 2025 – May 2025

- ❖ Conducting workshops on key AI concepts such as data analytics and deep learning with an attention to detail
- ❖ Explained Convolutional Neural Networks, transfer learning, data ethics, machine learning, deep learning, and reinforcement learning

Academic Tutor – *Institute of Electronics and Electrical Engineers, UT Dallas*

September 2024 – May 2025

- ❖ Guiding students through digital circuits, circuit design compliance, MIPS assembly, C++, and Java for problem-solving

Key Technical Projects

QuadCore: AI-Powered Financial Web Application – *HackUTD*

- ❖ Implemented 4 AI models for credit card fraud detection, budget monitoring and stock market forecasting using linear regression, and personalized financial advice with a Large Language Model

SpeakWise: Smart Interview Preparation Assistant – *The Association of Computing and Machinery*

- ❖ NLP-based public speaking coach app that leverages OpenAI API for evaluating mock interview responses and sentiment analysis for analyzing confidence and tone

Dynamic Turtelism ROS2

- ❖ Multi-agent control logic simulation with cursor-tracking and reactive behavior switching between robot turtles

Awards and Honors

- ❖ **Academic Excellence Scholarship** – *UT Dallas, Fall 2023*
 - ❖ **Dean's List** – *UT Dallas, Fall 2023 to Spring 2025*
 - ❖ **1st Place for Medical Imaging in Lumbar Spine Diagnostics** – *The Artificial Intelligence Society, Fall 2024*
-