ADARSH SARIPALLI

480-803-9637 • adarshsaripalli15@gmail.com • **linkedin** • **github** • **Unity APKS**

SUMMARY

Research Deployment of AI, exploring script deciphering, championing Generative AI accountability, and crafting immersive extended reality experiences with Reinforcement Learning capabilities, seeking work opportunities for enhanced learning.

EDUCATION

Master of Science in Computer Science — **Expected** May 2025
Arizona State University, Tempe, AZ, US — **3.89**/4.0 GPA

Bachelors of Technology in Computer Science — May 2023
Andhra University, Visakhapatnam, AP, India — **8.62**/10.00 GPA

TECHNICAL SKILLS

Programming Languages: Python, Swift, C#, R, C/C++, Java, SQL (MySQL), JavaScript, CUDA, Kubernetes, Docker, Apache Kafka
Developer Tools: Unity, Flutter, Matlab, Git, Jenkins CI, Postman, REST APIs, ROS2, IBM SPSS, Qualtrics
AI and Data Processing: Numpy, Sklearn, Keras, PyTorch, TensorFlow, Matplotlib, Matlab, Prompt Engineering , Huggingface.io

PROFESSIONAL EXPERIENCE

Center for Human, AI and Robot Teaming, ASU: Research Assistant Volunteer — November 2023 - Present
- Currently engaged in the real-time deployment of advanced Generative AI models with APTIMA and DARPA pushing the scope of usability and reliability. Developing mitigating strategies using TensorFlow, PyTorch, and Python.
- Analyzing data, crafting task scenarios for robot-human-AI teaming in the ASIST studies. Utilizing Minecraft as a testbed, collecting evidence in the virtual world for tasks such as bomb disposal and search-rescue missions.

Multisoftnet Dot Com Pvt. Ltd, IND: Software Development Engineer Intern — June 2022 - October 2022
- Built a scalable ecommerce website for wholesale household products using React and Express, leveraging Postman API for API testing and MongoDB for backend data storage, ensuring an efficient grocery shopping experience.
- Developed a data-driven backend system using MongoDB, boosting website performance and scalability for seamless user shopping experience. Accommodating over 10,000 monthly users and handling substantial monthly traffic.
- Implemented Multi-Factor Authentication by linking to Duo Security, Role-Based Access Control authorization, and Centralized Logging mechanisms like Elasticsearch, Logstash, and Kibana for revised security and tracking.

RELEVANT PROJECTS

Copyright Compliance Framework for Generative AI — January 2024 - April 2024
- Developed a Generative LLM framework to ensure compliance with copyright regulations in AI-generated content.
- Utilized Llama2 knowledge space to train the LLM model, integrating citations for each output to track data sources.
- Implemented Word-Vector matching and ALCE attributes using "hugging face-cli" to suppress outputs that exact-match training data, minimizing regurgitation, enhancing legal compliance and reducing the risk of copyright infringement.

Enhancing Object Detection with Contextual Enhancement — January 2024 - April 2024
- Engineered a robust pipeline using Deepoint to recognize pointing gestures, enabling interactions with video content.
- Employed ResNet-50 for precise object detection from video frames, enhancing accuracy in pointing at objects.
- Integrated OpenGL for real-time rendering of directional arrows, facilitating annotation of video content. Additionally, integrated Faster R-CNN to the Deepoint pipeline thereby Reduces computation of traditional methods by 24%

Advanced PAC-man: Automated Problem Solving Agent for Ghost Mazes — August 2023 - December 2023
- Developed an automated problem-solving agent for Pac-Man mazes, utilizing strategic decision-making techniques.
- Implemented multiagent Minimax and Expectimax algorithms to navigate adversarial and stochastic search scenarios.
- Applied reinforcement learning methodologies, including Value function, Q-learning, and approximate Q-learning, to effectively train the agent in rational policy-making across diverse maze configurations, ensuring adaptability.

EXTRA CURRICULAR ACTIVITIES

Club Lead, Google Developers Student Club, Andhra University, IND — August 2021 - May 2022
- Organized tech workshops/hackathons for Google Technologies like Flutter, TensorFlow, Google Cloud, and Firebase.
- Fostered partnerships with industry experts and orchestrated enlightening talks on diverse topics like Blockchain, UI/UX, and Machine Learning. Implemented strategies to boost club engagement and event attendance.