

Aditya Bhooshan Sahasrabuddhe

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Education

Arizona State University – Arizona, United States of America

Master of Science in Computer Science - awarded the Engineering Graduate Fellowship

Expected May 2026

GPA – 4/4

BITS Pilani – Dubai, United Arab Emirates

Bachelor of Engineering, Computer Science - awarded the Merit Scholarship

June 2022

CGPA – 8.18/10

Work Experience

Metrum AI

Applied AI SWE

Austin, TX, USA

May 2025 – Present

- Trained humanoid robots 10,000x faster using NVIDIA Isaac Lab.

Software Developer

August 2022 – July 2024

- Led chemical spill detection project showcased at **Dell Tech World 2024** utilizing **NVIDIA Isaac Sim** with Nova Carter robots for deployment. Introduced **NVIDIA Create XR** for immersive visualization. Exposure at Dell Tech World increased company outreach by 20%.
- Developed a multimodal AI use case demonstrating a **fully automated drive-thru** interaction.
- Constructed a custom voice assistant, integrating **OpenAI's Whisper** for transcription via a custom **GStreamer Pipeline** with an ALSA backend achieving 80-90% transcription accuracy.
- Collaborated in building **LLM chatbot**, including **fine tuned** versions tailored to client requirements boosting work efficiency by 30%.
- Transfer learned **YOLOv8-Seg** model to identify custom objects (fire extinguisher) with 93% accuracy.
- Built an application to demonstrate maximum number of **parallel video inference pipelines** from simulated traffic cameras, identifying pedestrian and vehicle violations catching 86%.
- Created an application to oversee factory workers, with capability to identify instances of social distancing violations, unauthorized access to restricted areas, and maintain facial recognition records for monitoring purposes as proof of concept.
- Trained and mentored interns, guiding through entry-level tasks to ensure smooth team integration.

L&T Electrical and Automation

Dubai, United Arab Emirates

Projects Intern (Automation)

August 2021 – January 2022

- Researched in development of PLC (Programmable Logic Controller) and SCADA (Supervisory Control and Data Acquisition) systems for automating freight facilities of Etihad Rail.

Projects

Image Classification using CNN - Built a Convolutional Neural Network (CNN) model for image classification, focusing on different types of animals achieving 90% accuracy.

Game Development (2048 Tile) - Generated heuristic search algorithm to solve the 2048 Tile game for an Artificial Intelligent agent making decisions 6x faster than humans (On average 6 Moves Per Second vs 1 Move Per Second).

PitchPerfect – AI-Powered Mock Interview Platform

Developed an end-to-end AI interview preparation tool that analyzes candidate responses using Whisper (ASR), VADER (sentiment), and Ollama (relevance scoring); improved mock interview feedback accuracy by 80% and enabled 6x faster self-assessment cycles via a Gradio-based interface.

Technical Skills

Programming Languages and Tools - Python, Java, C++, Gstreamer, DLStreamer pipelines, FFMPEG, Docker containers, API Servers, NVIDIA Omniverse, AI Workloads, SQL, Microsoft Excel (Pivot Table).