

# Saiteja Venkateshwa Rao Dasari

(480) 749-7265 — [sdasar38@asu.edu](mailto:sdasar38@asu.edu) — Tempe, Arizona — [linkedin.com/in/saiteja-venkateshwa-rao-dasari](https://linkedin.com/in/saiteja-venkateshwa-rao-dasari) — [github.com/dstejagit09](https://github.com/dstejagit09)

## SUMMARY

MS Robotics & Autonomous Systems @ ASU (GPA 3.89) with experience in UAV controls, ROS/ROS2 autonomy, and OpenCV-based perception across simulation and hardware. Built a multi-robot ROS2 + Gazebo TurtleBot system (Hungarian allocation + A\* planning) and developing fault-tolerant Crazyflie control for single-motor failure recovery using FDI and controller reconfiguration.

## EDUCATION

<b>Arizona State University</b> <i>M.S. Robotics and Autonomous Systems (Systems Engineering)</i> , GPA: 3.89	Aug. 2024 – 2026 Tempe, AZ
• <b>Relevant Coursework:</b> Systems Engineering, Aerial Robotics, Mechatronics, Multi-Robot Systems, Soft Robotics	
<b>Chaitanya Bharathi Institute of Technology</b> <i>B.E. Electrical and Electronics Engineering</i>	Aug. 2020 – 2024 Hyderabad, Telangana

## PROJECTS

<b>Fault-Tolerant Control of Crazyflie Quadrotor</b>	Present
• Developing a fault-tolerant control system for a Crazyflie quadrotor to maintain stable flight during single-motor failure using fault detection/isolation and controller reconfiguration, validated through simulation-to-hardware testing	
<b>Multi-Robot Task Allocation &amp; Navigation</b>	Dec. 2025
• Built a multi-robot ROS2 and Gazebo TurtleBot simulation with centralized task management, implementing Hungarian task allocation and A* planning and costmap inflation for collision-aware, efficient concurrent mission execution	
<b>Crop Weed Detection using ROSMaster X3</b>	May 2025
• Deployed an ML weed-vs-crop detector on ROSMaster X3 (ROS) to support precision agriculture	
• Integrated real-time inference and visualization nodes to publish detections for downstream robot actions	
<b>Autonomous Drone Landing on a Moving Platform</b>	May 2025
• Simulated flight dynamics in MATLAB/Simulink (digital twin) and designed control logic for landing sequences	
• Implemented onboard vision tracking on a Parrot Mambo to land on a moving color-tagged platform	
<b>Maze Solving &amp; Path Planning using 6-DOF myCobot600 Robot Arm</b>	Dec. 2024
• Built a vision pipeline for maze detection/segmentation and generated an occupancy-grid representation for planning	
• Computed paths using A* and executed waypoint trajectories through integrated myCobot600 motion control	

## EXPERIENCE

<b>Honeywell Extern</b> <i>Arizona State University Collaborative Research Project</i>	Aug. 2025 – Present Tempe, AZ
• Built an AI-driven Air Traffic Controller training dashboard with Honeywell Aerospace, integrating LLM-based pilot simulations, communication analytics, and performance visualizations	
<b>Teaching Assistant / Instructional Aide</b> <i>Arizona State University (MATLAB Programming; Controls &amp; Systems Lab)</i>	Jan. 2025 – Present Tempe, AZ
• Conducted weekly office hours; supported MATLAB programming and controls labs; assisted grading and delivered review lectures to reinforce core concepts	
<b>Production Engineering Intern</b> <i>Marut Drones (IIT-Hyderabad)</i>	Oct. 2023 – Mar. 2024 Hyderabad, Telangana
• Assembled and validated electronic/mechanical subsystems across multiple drone platforms; led quality checks and bench testing for reliable builds and increased efficiency by 2%	
• Supported a P80 heavy-payload drone; configured ArduPilot/Mission Planner and improved flight performance via PID tuning with log analysis by 5%	

## SKILLS & CERTIFICATIONS

<b>Programming:</b> C, Python, MATLAB
<b>Robotics:</b> ROS1/ROS2, Gazebo, RViz, TF, URDF, Linux, Git, ArduPilot, Mission Planner
<b>Autonomy/Perception:</b> A*, Hungarian Allocation, Costmaps, Occupancy Grid, Motion Planning, OpenCV, Detection/Tracking
<b>Controls:</b> PID Tuning, MATLAB/Simulink, FDI, Controller Reconfiguration, Flight Log Analysis
<b>Certifications:</b> Hugging Face RL; Udemy ROS/ROS2
<b>Publication:</b> SCADA-Based Substation Control Panel & Operations