Tanu Shree Kumawat

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Education

Ramaiah Institute of Technology, Bengaluru

B.E. - Computer Science and Engineering - CGPA -

9.1

A's Steward Morris School, Bhilwara, Rajasthan

Upper Secondary Graduation - Percentage - 92.0

Work Experience

Research Intern - Samsung (https://research.samsung.com/sri-b)

Oct '2024 - Present

• Working with Samsung R&D Institute India-Bangalore under Samsung PRISM program.

Information Technology Team - Editha UAS (https://www.edhitha.com/)

Nov '2023 - Jul '2024

- Implemented machine learning models for object detection and text classification, achieving up to 95% accuracy on a dataset of 80,000 images and compared performance for aerial and underwater vision tasks. | YOLOv8, YOLOv5, Efficient Net, SSD MobileNet, TensorFlow
- Worked on computer vision systems for UAVs and AUVs, enabling real-time detection and tracking at 30 FPS in dynamic environments. | Arducam, Raspberry Pi camera, Webcam
- Designed and implemented solutions for underwater path planning, and navigation | ROS
- Enhanced detection and classification performance through advanced image processing techniques, achieving text extraction accuracy of 98%, improving system reliability for automated tasks.. | OpenCV, Text extraction

Achievements

- Achieved 7th place out of 79 teams in the prestigious SAUVC 2024, showcasing strong technical skills and innovative design in developing autonomous underwater vehicles during a highly competitive event held annually in Singapore.
- SUAS Competition (2024) Maryland, USA
 Contributed to the team that secured 4th place overall and earned 1st place in Technical Design and Flight Readiness at the SUAS Competition.

Skills

Programming Languages: C++, Python, Java (intermediate)

Developer Tools: VS Code, Git, GitHub, Canva

Technical Skills: Computer Vision, Machine Learning, Automation, Onboard Computers

Fundamentals: Data Structures, Operating System, Data Communication and Networking, Linux Kernel Soft Skills: - Public Speaking, Quick Learner, Adaptability, Positive Attitude, Collaboration, Problem

Solving, Communication

Projects

Hand Gesture Controlled Drone System | Pluto , Object Detection, Yolo v8, ROS

May'2025

• Developed a hand gesture controlled drone system, trained over 8000 images with over 95% accuracy

Awaaz-AI | Google Cloud Services, Google Gemini | IDE - VS Code, Postman

Nov '2024

Developed a chatbot platform providing legal assistance and trauma support for women, assisting over 500 users by leveraging AI and NLP for secure and empathetic interactions.

Color Space Optimization | K-Means clustering, Python, matplotlib

Oct '2024

Other projects: Carpool Website, Anomaly detection, recommendation system: collaborative filtering.