

K DHYANA SAMAGA

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SUMMARY

AI & Computer Vision Engineer with hands-on experience designing and deploying object detection, image classification, and automation workflows using n8n. Skilled in building end-to-end AI pipelines, integrating APIs, and optimizing automation to boost efficiency and accuracy. Successfully developed intelligent systems that improved operational speed by **40%** and reduced manual workload. Known for strong problem-solving skills, rapid prototyping, and delivering practical, scalable, and high-impact AI solutions with confidence and consistency.

WORK EXPERIENCE

Thaniya Technologies,Mangaluru

Nov 2024 – Aug 2025

- Delivered aptitude and technical training workshops across multiple colleges, enhancing student employability and problem-solving skills.
- Designed and facilitated coding, aptitude, and interview preparation sessions, impacting **400+** students' career readiness.

EDUCATION

Bachelor of Engineering (B.E) in Artificial Intelligence and Machine Learning

2022-2026

Srinivas Institute of Technology, Mangaluru

- CGPA: **7.89**

Pre-University (Science – PCME)

2020-2022

Vidyodaya PU College, Udupi

- Percentage: **76%**

Secondary Education (SSLC)

2020

Shri Anantheshwara English Medium High School, Udupi

- Percentage: **92%**

SKILLS

- **Programming:** Python, Java, C
- **Databases:** MongoDB
- **Libraries & Frameworks:** NumPy, Pandas, Scikit-Learn, TensorFlow, OpenCV, JDBC, PyMongo, Requests,ImageLab, Roboflow, MLflow
- **Automation & Tools:** n8n, GitHub
- **Soft Skills:** Communication, Leadership, Presentation, Innovation, Adaptability

PROJECTS

RakshaNetra – Real-Time Animal Detection & Alert System

- Developed a real-time animal intrusion monitoring system using Computer Vision and IoT to prevent farm and wildlife accidents by detecting animals through a live camera feed and sending instant alerts to users. I was responsible for the hardware setup and system integration, including configuring the Raspberry Pi with a motion camera module and deploying the trained **YOLOv5** model for real-time inference. Additionally, I integrated the system with the Telegram API to automate alert notifications and handled power setup, device communication, and real-time video streaming.
- Tools: YOLOv5, Raspberry Pi, Motion Camera, Python, Roboflow, Google Colab, Telegram Bot API

Ship Detection Using SAR Images

- Developed a ship detection system using Synthetic Aperture Radar (SAR) images and **YOLOv3**, achieving **70–80%** detection accuracy. My primary responsibility was dataset preprocessing and cleaning, including filtering noisy SAR images, organizing datasets, annotating data, and preparing training pipelines for improved model accuracy. The trained model was deployed using Streamlit and Django to enable real-time ship detection and evaluation through a web interface.
- Tools: YOLOv3, Python, Streamlit, Django, VS Code, Open-source SAR datasets

Sign Language Gesture Detection

- Built a **YOLOv8** based sign language gesture recognition system capable of identifying gestures like **"Hello," "OK," and "No"** for communication assistance applications. I independently handled the entire pipeline, including collecting and labeling the dataset in Roboflow, training the YOLOv8 model, and implementing real-time gesture detection using Python and OpenCV.
 - Tools: YOLOv8, Roboflow, Google Colab, Python, OpenCV
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CERTIFICATIONS

- IT Specialist – Cloud Computing (2025) – Certiport
 - Java Specialist Badge (2024) – Certiport
 - Google Cloud Career Launchpad – Cloud Engineer Track (2024) – Google Cloud
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ACHIEVEMENTS

- Event Coordinator – AIML Department (2024): Organized and managed multiple department events, boosting student engagement and participation.
 - Team Lead – 24-Hour Hackathon (2024): Led planning, logistics, and team coordination to ensure smooth execution of the event.
 - 1st Place – Coding Competition (2024): Secured first place in an inter-department coding contest for strong algorithmic and problem-solving skills.
 - Web Design Team Member – SSOSC (2024): Contributed to front-end development and UI improvements for student technical club projects.
 - Documentation Lead – SSOSC (2025): Led documentation efforts for workshops, technical events, and projects ensuring clarity, structure, and completeness.
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