SANJAYKUMAR M

Machine Learning Engineer

CONTACT

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SKILLS

- **Programming & Data:** C, Python (Pandas, NumPy),SQL
- **Machine Learning:** Scikit-learn, Regression, Classification, Clustering
- **Deep Learning & AI:** TensorFlow, Keras, PyTorch, YOLO, CNN, RNN
- **Computer Vision:** OpenCV, MediaPipe, Object Detection, Gesture Recognition
- **Tools & Platforms:** Google Colab, GitHub, VS Code
- **Databases:** MySQL
- **Soft Skills:** Problem-Solving, Teamwork, Adaptability, Communication

EDUCATION

2019 - 2020 | 2021-2022
G.H.S.S SCHOOL

- 10th Percentage : 71.8%
- 12th Percentage : 79.16%

2022 - 2026
BANNARI AMMAN INSTITUTE OF TECHNOLOGY

- Computer Science Engineering
- CGPA: 6.98

PROFILE

Proactive and knowledge-driven Machine Learning Engineer (Entry-level) with a strong foundation in Python, Data Science, Machine Learning, and Deep Learning. Skilled in data analysis, model building, and computer vision applications through hands-on project experience. Strong problem-solving, adaptability, and teamwork abilities, seeking an entry-level opportunity to contribute to innovative AI-driven solutions while continuously enhancing technical expertise.

PROJECTS

Oil Spill Detection

- Developed and deployed a machine learning model integrating AIS and satellite imagery to accurately detect oil spills. Enhanced anomaly detection efficiency for maritime safety and environmental monitoring.
- **Key technologies:** Python, ML, Computer Vision, Data Analysis.

AI Virtual Painting

- Developed an AI-driven digital painting system leveraging hand gesture recognition. Implemented interactive features such as color selection, undo/redo functionality using OpenCV and MediaPipe.
- **Key technologies:** Python, Computer Vision, MediaPipe, ML, Human-Computer Interaction.

Alzheimer's Disease Prediction

- Designed and implemented a predictive analytics model using machine learning algorithms to assist in early detection and treatment planning of Alzheimer's disease.
- **Key technologies:** Python, ML, Data Preprocessing, Predictive Modeling.

Real-Time Object Detection

- Developed and deployed YOLO/SSD models for real-time object detection in video streams. Optimized model accuracy and inference speed for live object tracking applications.
- **Key technologies:** Python, Deep Learning, YOLO, Computer Vision.

ACHIEVEMENTS

SIH 2024 FINALIST

- Developed an ML-based solution for oil spill detection in marine environments using AIS and satellite datasets. Selected for the Grand Finale of Smart India Hackathon 2024 under the Ministry of Earth Sciences (INCOIS).

GALAXY '24 PHASE-II – 3RD PRIZE

- Presented a research paper on AI Virtual Painting at the National Level Technical Symposium hosted by Government College of Engineering, Erode. Awarded 3rd Prize for excellence in research and presentation.