

NIVETHA G

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EDUCATION:

B.E–CSE(Artificial intelligence and machine learning)
Anna University, India ,Sri Sairam engineering college

CGPA: 8.60
November 2022- May 2026

INTERNSHIP:

Sairam Techno Incubator (R&D TEAM) |Machine Learning Intern | June 2024 | Chennai, India

- Engineered a computer vision-based system for weld classification, achieving **95% accuracy** in identifying welded and non-welded images, reducing error rates by 20%.
- Created and annotated a custom dataset of **1,000+ images** using LabelImg, applying advanced image processing techniques to ensure high detection precision.
- Skills:** Object Detection, Computer Vision, YOLO, Matplotlib, Python, TensorFlow

Sairam Techno Incubator (R&D TEAM) | Software Developer Intern | Feb 2025 | Chennai, India

- Developed a computer vision module for an autonomous vehicle, focusing on lane detection and path planning, **improving vehicle navigation accuracy by 15%**.
- Implemented Bis-Net for semantic segmentation using the Cityscapes dataset, enhancing lane detection capabilities.
- Applied Hough Transform and edge detection techniques for real-time road segmentation and navigation.
- Skills:** Computer Vision, OpenCV, Hough Transform, Image Processing, Path Planning, Python.

PROJECTS:

Toxicity & Morphed Picture Detection

- Developed **ToxicScan**, a **Telegram bot** that allows users to instantly check whether a comment is toxic.
- Leveraged NLP (LSTM, BERT) and hybrid transformers(Vit and Swin) to classify **15,000+ online comments** and detect **2,000+ morphed images** with **90% accuracy**.
- Used web scraping and image augmentation techniques, improving data diversity and model performance by **20%**.
- Skills:** NLP, Text Classification, Web Scraping, Speech Toxic Word Detection, LSTM, BERT, OpenCV, Image Augmentation, Feature Extraction.

HungerHeal - App Development

- Built a real-time food donation platform with tracking and location-based services, enabling efficient connections between donors, volunteers, and recipients.
- Integrated an AI-powered chatbot, boosting user engagement and response times by **40%**.
- Implemented Firebase Authentication** with multi-factor authentication and **PostgreSQL** for secure data storage, significantly reducing unauthorized access attempts by 60%.
- Skills:** Firebase, PostgreSQL, Real-time Database, User Authentication, Flutter, Figma

CERTIFICATIONS AND ACHIEVEMENTS

CERTIFICATIONS:

- Gold Medal in **Big Data Computing** (NPTEL)
- Silver Medal in **Python for Data Science** (NPTEL)
- Topper in **Industrial IoT 2.0**
- NPTEL Discipline Star** and **Motivational Learner** – Recognized for consistent academic performance

AWARDS:

- 1st Place** : ML DL HACKATHON (NDLI CLUB , 6-Hour Challenge)
- 3rd Place:** Nexus 2.0 Project Expo

CONFERENCE PRESENTATION:

- Toxic Comment Detection using Learning Models and POS Tagging* — Presented at **CODE AI International Conference, Manipal Institute of Technology, Bangalore**
- Presented a research paper titled *“A Predictive Analytics in Cardiology: Evaluating Machine Learning Algorithms”* at the **5th International Conference on Computing and Communication Technologies (ICCT'25)**.

VOLUNTEERING

- Assisted in organizing the **AIOTA event**, coordinating AI-centric workshops and sessions, contributing to smooth event execution while honing project management and collaboration skills.

TECHNICAL SKILLS

Programming Languages: Python, C, Java (Beginner), Flutter (Beginner), SQL

Machine Learning & AI: Deep Learning, NLP, Computer Vision, Image Processing, Big Data Analytics

Data Analytics & Visualization: Power BI, Matplotlib, Seaborn

Cloud & DevOps: Firebase, AWS, Kubernetes, Docker,Cron jobs

Soft Skills: Collaboration, Problem-Solving, Critical Thinking, Project Management

LANGUAGES

FLUENT : TAMIL,ENGLISH ,**CONVERSATIONAL:** HINDI