

ANUSHYA VARSHINI K

anukarthikeyan03@gmail.com | +91 63697 25720 | linkedin.com/in/anushyavarshinik |
github.com/anushya03

Professional Summary

Machine Learning Engineer and Full-Stack Developer with experience in AI, computer vision, and NLP. Skilled in Python, TensorFlow, PyTorch, SQL, and Web frameworks. Proven ability to design and deploy AI-driven solutions that include defect detection, toxic comment classification, and RAG-based chatbots. Strong academic foundation with achievements in national-level competitions.

Education

CGPA: 8.17 (up to 5th semester) **B.Tech – Artificial Intelligence & Data Science**, Bannari Amman Institute of Technology
86.83% **Higher Secondary**, Veveaham Matric Hr Sec School
84% **SSLC**, Adharsh Vidhyalaya Matric Hr Sec School

Technical Skills

Programming: Python, Java, SQL

Frameworks/Libraries: TensorFlow, PyTorch, YOLOv8, OpenCV, Hugging Face, FAISS, Flask, Qt

Tools: Git, GitHub, Jupyter Notebook, VS Code, Ollama

Domains: Machine Learning, Deep Learning, Computer Vision, NLP, Web Development

Projects

YOLOv8, Computer Vision **Defect Detection for Manufacturing Industries**

- Built an AI-based vision system for real-time defect detection (paint, weld, assembly, measurement, surface).
- Achieved high detection accuracy through an optimized deep learning pipeline.

CNN-RNN-LSTM, NLP **Comment Toxicity Detection**

- Developed a hybrid deep learning model for the detection of toxic comments.
- Achieved an F1-score of **87.59%**, automating moderation of hate speech and abusive content.

Flask, FAISS, Hugging Face, Ollama **Chatbot with Retrieval-Augmented Generation (RAG)**

- Implemented a FAISS-based vector search with contextual LLM responses.
- Deployed RetrievalQA for document-based Q&A.

Qt Framework **UI for Car Dashboard**

- Designed an interactive dashboard with real-time updates for speed, fuel, and navigation.
- Optimized for multiple display resolutions.

Achievements

- Finalist – VASHISHT 2023 (IEEE Paper Presentation), IIITDM Kancheepuram
- Finalist – TechSpectrum 2024 (Pitch Perfect), SRM University, Trichy
- Finalist – Tech-Challenge 2025 (Product Presentation), Caterpillar India Pvt. Ltd.

Extra-Curricular

- Youth Red Cross: Participated in health awareness and educational campaigns in rural communities.

Additional

Key Strengths: Problem Solving, Communication, Team Collaboration, Leadership, Time Management, Integrity

Languages: English (R/W/S), Tamil (R/W/S)