NITHISH S

Aspiring Software Developer

Phone: 7695807040   Email: nithish031105@gmail.com

LinkedIn: `www.linkedin.com/in/nithish-s-53a9a5292`   Location: Erode, Tamil Nadu, India

Profile Summary

Pre-final year Computer Science student skilled in Java and Python, with hands-on experience building ML/DL solutions for speech recognition and music emotion retrieval. Experienced in CNN models, audio feature engineering, and integrating AI into classical domains such as Tamil scripts and Carnatic music. Proficient in backend development using Spring Boot and REST APIs. AWS Certified Cloud Practitioner with project experience in RAG-based applications.

Skills

- **Programming:** Java, Python
- **Databases:** MongoDB,SQL (PostgreSQL)
- **Audio & Signal Processing:** MFCC, Chroma, Pitch Estimation
- **Frameworks & Tools:** Spring Boot, PyTorch, Scikit-learn, HuggingFace, Flask,Pandas,REST API
- **Cloud & Deployment:** AWS EC2, CloudFront, Git, Github, Docker

Research Projects

Music Emotion Recognition via Mid-Level Features

GitHub: `https://github.com/Nithish3115/Tonal_Based_Emotion_Synthesis.git`

Explored audio features like Mid-Level Perceptual features to classify emotions in music.

Applied machine learning models to analyze emotional content from songs.

Personal Projects

AI-Driven Train Induction Planning & Scheduling — Kochi Metro Rail Limited (KMRL)

GitHub: `https://github.com/Nithish3115/KMRL-SIH25.git`

Built an AI-based scheduling system to optimize induction of trains into daily service.

Modeled dependencies like train health, job-card status, and fitness certificates.

Thirukkural AI Bot (RAG Application)

GitHub: `https://github.com/Nithish3115/Thirukkural_Ai_Assistant.git`

Implemented a Retrieval-Augmented Generation (RAG) chatbot for answering queries using Thirukkural.

Used embeddings and FAISS for semantic retrieval.

Certifications

- AWS Certified Cloud Practitioner — `https://www.credly.com/badges/140be03a-7b53-4434-bab8-1c4f1746c613/public_url`
- AWS Cloud Essentials — `https://www.credly.com/badges/cb4252d0-e5ee-4406-b5d1-a9168f3853bd/public_url`
- GitHub Foundations — `https://www.credly.com/badges/9601491a-ad32-460e-b44f-1ce3ea0efc26/public_url`

Events and Achievements

- ADCx 2025 Winner — Best Music Hack: Music Buddy – Alankaar
  GitHub: `https://github.com/Nithish3115/Alankar.git`

Education

B.E. Computer Science And Engineering

Bannari Amman Institute of Technology, Sathyamangalam — CGPA: 8.6   2025