

# GOKULKRISHNAN THANGAMANI

☎ +91 7095333311 ◇ 📍 Hyderabad, India

## EDUCATION

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**Amrita Vishwa Vidyapeetham, Coimbatore**

B.Tech Computer Science [Artificial Intelligence] CGPA - 7.9

2021 - 2025

**FIITJEE, Vijayawada**

Intermediate, MPC - 97%

2019 - 2021

## SKILLS

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**Programming :** Python, Java

**Libraries :** Numpy, Pandas, Seaborn, Matplotlib, Scikit Learn, Pytorch

**Data Analysys :** SQL, Power BI

**Soft Skills :** Team Work, Decision Making, Planning, Active Listening

## PROJECTS

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### Transformer Based Depression Detection

- Engineered a depression detection system using speech processing and Vision Transformers, achieving 96 % accuracy, outperforming baseline models.
- Pre-processed 150+ audio files from dataset (DAIC-WOZ), optimizing feature extraction with MFCC on 100000+ audio segments.
- Trained the ViT model on pre-processed datasets, significantly enhancing detection accuracy.

### Offensive Humour Classification

- Developed a parallel neural network architecture leveraging BERT embeddings for humor classification achieving 89% accuracy.
- Built a system to detect offensive humor using natural language processing (NLP) techniques.
- Conducted a comparative analysis using traditional features like TF-IDF, Word2Vec, GloVe, and FastText embeddings with machine learning classifiers such as SVM and Random Forest.

### Deblurring of Chest X-ray Images

- Engineered a synthetic Chest X-ray dataset with 900 images across three levels of blurring, leveraging the sharp dataset for enhanced deblurring evaluation.
- Evaluated deep learning architectures like Convolutional Autoencoders, FCN, U-Net, and GAN for deblurring.
- Achieved superior performance with U-Net and GAN in medical image enhancement