

# Sai Sri Pavan Goli

[in](#) SAI SRI PAVAN GOLI | [✉ gsaisripavan@gmail.com](mailto:gsaisripavan@gmail.com) | [☎ +91-8332811444](tel:+91-8332811444)

## OBJECTIVE

Highly motivated and results-driven Machine Learning Engineer with a passion for developing innovative solutions. Equipped with a strong foundation in building and deploying machine learning models, I excel in optimizing algorithms to achieve superior accuracy and reduce processing time. My expertise extends to designing and implementing data preprocessing pipelines that significantly enhance the quality of input data, ensuring models perform at their best.

## CORE SKILLS

**Programming Languages:** Python, Java  
**Courses:** Machine Learning, Deep learning(TensorFlow), Natural language processing, Data Structures and Algorithms, Big Data, Cloud Computing(AWS), Database Management System  
**Databases:** MongoDB, SQL  
**Tools:** PowerBI, Tableau

## EDUCATION

<b>Amrita Vishwa Vidyapeetham</b> <i>B.Tech in Computer Science</i>	GPA: 6.62/10	Bengaluru, Karnataka 2020-2024
<b>Tirumala Jr College</b> <i>Intermediate Education</i>	GPA: 9.25/10	Rajahmundry, Andhra Pradesh 2018-2020
<b>Aditya E.M School</b> <i>Secondary Education</i>	GPA: 9.8/10	G.Mamidada, Andhra Pradesh 2017-2018

## CERTIFICATIONS

- AWS Academy Introduction to Cloud
- AWS Academy Cloud Foundations
- Python
- SQL Certification

## PROJECT WORK

### Smart Farming Assistant

- Developed and integrated deep learning models (MobileNetV2, DenseNet121, CNN) into the Smart Farming Assistant Android app, achieving a good accuracy in paddy disease detection using TensorFlow Lite for efficient on-device inference.
- Optimized model performance using techniques like Adam optimizer, early stopping, and learning rate scheduling, and built a machine learning pipeline for real-time disease classification and crop management insights.
- Integrated a fertilizer calculator and agricultural resources into the app, while securing user data through authentication protocols, enhancing crop yield and improving farming practices through

AI-powered predictions.

### **Image Caption Generator**

- Developed a system to generate image descriptions using CNN for visual feature extraction and RNN for text generation.
- Trained the model on a large-scale image-text dataset, producing accurate and contextually relevant captions.
- Applied transfer learning with pre-trained models, optimizing accuracy and reducing training time through model fine-tuning.

### **SDG Goals**

- Developed a machine learning model to predict the Multi-Dimensional Poverty Index (MDPI) using data from NITI Aayog and Sustainable Development Goals (SDGs 1, 2, 3, and 6), with effective data preprocessing and feature selection.
- Applied K-Means and Affinity Propagation clustering, and evaluated multiple classification and regression models, achieving good performance, with OLS regression giving the best results.
- Identified key poverty indicators like population below the poverty line, child stunting, and access to safe water, using Python, scikit-learn, and matplotlib for analysis and evaluation.

## **LANGUAGES**

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- English
- Telugu
- Hindi