# Santhosh Kumar Penuguduru

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**LinkedIn Profile**

## Education

**• MTech specialization in Artificial Intelligence** ***2022-24***
*Indian Institute Of Information Technology ,Vadodara* CGPA:6.75

**•B.Tech in ECE**
*Godavari Institute Of Engineering And Technology* Percentage:61.56

## Experience

**• ISRO** ***JUN 2023 - JUN-2024***
***AI AND ML Research Internship*** AHMEDABAD

- Developed efficient surrogate model for radiative transfer codes in satellite observations of atmospheric trace gases by using Machine learning.
- Cloud Seeding: Enhances precipitation by modifying cloud properties for increased rainfall or snowfall in specific regions.
- ML Techniques: Analyze cloud data patterns to predict favourable conditions for cloud seeding.
- Developed AI models for accurate precipitation estimation using Thiruvananthapuram Doppler weather radar and GPM DPR data. Proficient in radar meteorology, data analysis, and machine learning, focusing on enhancing weather prediction accuracy.

**• TEACHING ASSISTANT IN IIITV** ***AUG 2022– DEC 2022***
***MA 201 - Probability And Statistics*** Gandhinagar

- Worked as a Teaching Assistant for Probability and Statistics course.

**• Subject Matter Expert** ***AUG 2017– DEC 2022***
***Chegg*** Chegg India

- Worked as subject matter expert in electrical engineering.

## Personal Projects

**• Chat With Multiple PDF Documents With Langchain and Google Gemini pro** ***Mar 2023***
***LLM***

- Implemented a solution for interacting with multiple PDF documents using Langchain and Google Gemini Pro (LLM). Enabled advanced document processing, querying, and conversational AI capabilities for enhanced data extraction and user interaction.

**• Resume ATS Tracking LLM project with Google Gemini Pro** ***Apr-2023***
***LLM***

- Developed an ATS-compatible resume tracking system using Google Gemini Pro (LLM). Enhanced resume parsing, keyword extraction, and candidate matching, improving recruitment efficiency and accuracy.

**• FIRE AND SMOKE DETECTION CNN** ***Apr 2023 – May 2023***
***Machine Learning***

- Focused on reducing false alarms to improve precision and reliability. **Convolutional Neural Networks (CNNs)** and a dataset of **30,000** real-world fire and smoke images were used for training.
- Achieved **95 % accuracy** with the CNN model, outperforming traditional detection methods.
- Reduced **false alarms by 80 %**, enhancing the system's reliability and usability.

## Technical Skills and Interests

**Languages** : Python, C, Java, HTML

**Tools** : Power BI, Git

**Databases** :Mysql, PostgreSql **Non Technical Skills** : Leadership, Management, Communication