# Gujjula Samarasimha Reddy

Contact No: +919877403236 Email: gujjulassr@gmail.com

#### \_\_\_\_\_ Education

Year	Degree/Examination	Institution/Board	CGPA/Percentage
2025	Master by Research (Artificial intelligence)	Indian Institute of Technology Hyderabad	8.3/10.0
2018	Bachelor of Technology (Electronics and communication Engineering)	Lovely Professional University	8.51/10.0
2014	Intermediate (Class XII)	Narayana Junior College	95.9%
2012	Matriculation (Class X)	Sri Chaitanya Techno School	9.7/10.0

## Projects

### Course Project-NLP | Indian Institute of Technology Hyderabad

March 2024 - May 2024

This course project delves into enhancing machine translation performance, particularly in low-resource and domain transfer scenarios, leveraging large language models (LLMs) and prompting techniques. Building upon the observation that LLMs can struggle with rare words, we propose DiPMT, a method that empowers LLMs with fine-grained phrase-level control through prompt-based guidance. By integrating information from bilingual dictionaries, DiPMT offers LLMs a repertoire of potential translations for specific input words, enhancing their ability to handle rare vocabulary and improve translation quality. Our experiments, conducted on diverse datasets and language pairs, including English to Gujarathi and Telugu to English, underscore the effectiveness of DiPMT across various scenarios. Furthermore, we provide insights into the controllability achieved by DiPMT, shedding light on its practical implications for real-world machine translation applications.

## M.Tech Project | Indian Institute of Technology Hyderabad

July 2023 - October 2025

The primary objective of this M.Tech project is to develop ProsodyTTS, a pioneering end-to-end speech synthesis model that addresses key limitations in existing systems. Our focus lies in enabling explicit control over prosody, a critical aspect often overlooked in traditional end-to-end approaches. Notably, our implementation emphasizes prosody transfer as part of a joint multi-scale cross-lingual speaking style transfer framework. This framework facilitates bidirectional speaking style transfer between languages at both global (utterance-level) and local (word-level) scales. Through a meticulously designed encoder-decoder architecture and a shared bidirectional attention mechanism, we aim to accurately model and transfer global and local speaking styles across languages. By incorporating advanced techniques for prosody control and cross-lingual style transfer, we seek to advance the state-of-the-art in end-to-end speech synthesis and pave the way for more versatile and naturalistic speech generation systems.

Certifications

Scaler | DSA February 2024

(Certificate Link)

Successfully completed DSA course and cleared mock interview

\_\_\_ Skills

Computer languages Python, C, Java Software Packages MySQL Additional Courses Taken Data Structure

Co-Curricular Activities

- Secured AIR798 in GATE 2019 (ECE).
- Selected for Airports Authority of India.
- Solved 576 DSA problems on GeeksForGeeks and active on other programming sites -LeetCode,Coding Studio
- Playing Cricket, I like to go cycling.