# Naga Sai Tarun Ganesh Emadabathuni

🔾 github.com/tarunganesh2004 | 🖬 linkedin.com/in/tarunganesh2004 | 🖪 enstarunganesh@gmail.com | 📞 +91-8309644254

# **EDUCATION**

#### Vellore Institute of Technology Amaravathi, India

Bachelors of Technology in Computer Science and Engineering

#### Sri Chaitanya Junior College Lakshmipuram, Guntur, India

Grade: 973/1000 Intermediate Education

2021 - present

2019 - 2021

GPA: 8.85/10.0

### EXPERIENCE

**SmartBridge** 2023

Machine Learning, Externship

- Acquired in-depth knowledge of machine learning and deep learning, including ANN, CNN, and RNN, through self-study and practical projects, applying these techniques to solve real-world problems.
- Built and optimized machine learning models, using them to analyze various datasets and generate valuable insights.
- Completed an image captioning project, successfully integrating image recognition models and achieving high accuracy.

NextGen Cloud Club

Member, VIT-AP

- Engaged in web development activities and posted questions on web forums and WhatsApp groups to foster discussion.
- Contributed to organizing and promoting club events and workshops related to web technologies.
- Enhanced web development skills through participation in club activities and online interactions.

#### Projects

**Hand Gesture Recognition** 2023 VIT-AP Link

- Developed a Pygame-based application to recognize and predict gestures drawn on a grid, with a custom-built user interface for interaction and visualization.
- Employed cosine similarity to accurately compare and predict user-drawn gestures against pre-saved templates, enhancing the system's precision in gesture recognition.
- Added functionality to save, load, and clear gestures, allowing users to manage and test different gestures efficiently within the application.

**Image Caption Generator** 2023 SmartBridge Link

- Implemented an image caption generator by combining DenseNet201, CNN, and LSTM to generate descriptive captions
- Trained the model on the Flickr8k dataset, which consists of 8000 images and corresponding captions, achieving robust generalization.
- Integrated the trained model into a Flask web application, allowing users to upload images and receive accurate, descriptive captions.

Weather Prediction Website 2024 VIT-AP Link

- Implemented real-time weather data retrieval using the OpenWeatherMap API, displaying temperature, humidity, and wind speed.
- Developed JavaScript functions to manage API requests and dynamically update the UI with weather details or error
- Ensured smooth user experience by integrating error handling and data validation mechanisms.

#### TECHNICAL SKILLS

Programming languages: Java, Python, MySQL Web Technologies: HTML, CSS, JavaScript ML/AI: Numpy, Pandas, Matplotlib

Tools: GitHub, Visual Studio Code, Eclipse

# Relevant Coursework

Computer Science: Data Structures and Algorithms, Databases, Machine Learning, Deep Learning, Computer Networks Mathematics: Discrete Maths, Applied Statistics, Number Theory, Linear Algebra

## CERTIFICATIONS & ACHIEVEMENTS

- Completed Google Developers SmartBridge AI-ML Certification Link
- Achieved 5-star rating in Python and Java on HackerRank Link
- Completed NERD+ (DSA using Java) certification from VIT-AP with strong commitment and excellence Link
- Solved 500+ problems on LeetCode and GeeksforGeeks, demonstrating strong coding and algorithmic skills
- Completed a data analytics externship at InTrainTech, gaining hands-on experience in data analysis, visualization, and reporting - Link