Naga Sai Tarun Ganesh Emadabathuni

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EDUCATION

Vellore Institute of Technology Amaravathi, India — 2021 - present
Bachelors of Technology in Computer Science and Engineering — GPA: 8.85/10.0

Sri Chaitanya Junior College Lakshmipuram, Guntur, India — 2019 - 2021
Intermediate Education — Grade: 973/1000

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 — 2023
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 for images.
- 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.

Task Management App — 2024
Personal — Link

- Developed a full-stack task management application using React for the frontend, Node.js and Express for the backend, and MySQL for persistent data storage.
- Created and integrated RESTful API endpoints for managing tasks and users, supporting full CRUD operations between the frontend and backend.
- Implemented a responsive UI with Bootstrap and handled API requests with Axios to ensure smooth, real-time task management.

TECHNICAL SKILLS

Programming languages: Java, Python, MySQL, PHP
Web Technologies: HTML, CSS, JavaScript, ReactJS, NodeJS, Express, Flask
ML/AI: Numpy, Pandas, Matplotlib, Tensorflow
Tools: GitHub, Visual Studio Code, Neovim, 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 300+ 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