Jai Vadula

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EDUCATION

Vellore Institute of Technology – Bhopal   Bhopal, Madhya Pradesh
Integrated M.Tech in Computer Science and Engineering   Expected May 2026
Major: Computer Science — Minor: Artificial Intelligence   CGPA: 8.62/10

Amity International School   Gurgaon, Haryana
CBSE 12th Standard Percentage: 86.0   May 2021

OLF Convent School   Gurgaon, Haryana
CBSE 10th Standard Percentage: 86.2   May 2019

SKILLS AND INTERESTS

- **Programming Languages**: C++, Python
- **Libraries and Frameworks**: TensorFlow, Keras, Numpy, Pandas, Matplotlib, Scikit-Learn
- **Soft Skills**: Data-driven Decision Making, Complex Data Interpretation, Creating Visual Insights
- **Interests**: Listening to music, Cooking, Gardening
- **Languages**: Fluent in Hindi, English

PROJECTS

Solar Panel Detection System using Object Detection Transformer   March 2024 – October 2024
- Engineered a solar panel detection prototype using a custom Object Detection Transformer trained on Indian imagery, achieving 99% accuracy and 20% faster simulated inspection times.
- Deployed custom Object Detection Transformer for real-world rooftop solar panel detection, accelerating urban planning assessments and cutting down inspection times by 20% in simulated tests.

Indian Sign Language Recognition using LSTM Model   June 2022 – October 2022
- Developed an LSTM model to classify 10 Indian Sign Language gestures, achieving 91.5% evaluation accuracy (12% higher than CNN baselines).
- Created a dataset of 200,000 images using OpenCV and MediaPipe Holistic, capturing hand/face/pose markers across 8 subjects for robust training.
- Designed a 14-layer LSTM architecture with Adam optimization, achieving 94.28% training accuracy for sequential gesture recognition.
- Built a specialized dataset for numerical gestures (0–9), enabling high-precision classification for accessibility applications.

CERTIFICATIONS

GitHub Foundations Certification – GitHub
- Acquired expertise in version control and collaborative development workflows through hands-on repository management, improving code collaboration efficiency.

Machine Learning Specialization – Coursera
- Mastered advanced machine learning techniques by completing a comprehensive curriculum on supervised/unsupervised learning and neural networks, enabling practical application in machine learning projects.

CO-CURRICULAR ACTIVITIES

Data Science Hackathon – Kharagpur   December 2024 – January 2025
- Advanced to Round 2 of the Kharagpur Data Science Hackathon 2025 after successfully clearing Round 1, which involved a rigorous quiz assessing knowledge of machine learning, deep learning, and data science concepts.

Data Science Simulation – Forage   August 2024 – September 2024
- Explored customer review data using advanced scraping techniques, identifying 3 key factors influencing buying behaviour.
- Applied predictive modelling concepts to analyse trends in purchasing decisions, developing actionable insights to enhance marketing strategies.