

Education

Amrita Vishwa Vidyapeetham

Chennai, India

Bachelor of Technology - Computer Science Engineering (Specialization in Artificial Intelligence)

2021–2025

Technical Skills

- **Programming Languages:** Python, Java, SQL, HTML, CSS, JavaScript, PHP
- **Tools and Technologies:** Microsoft Power BI, TensorFlow, PyTorch, NLTK, React.js, Node.js
- **Machine Learning:** Supervised Learning, Deep Learning, Reinforcement Learning
- **Database Management:** SQL (MySQL), NoSQL (MongoDB)
- **Data Analysis Automation:** Data Collection, Cleaning, and Processing, Data Visualization
- **Version Control:** Git, GitHub
- **IDEs and Notebooks:** Jupyter Notebook, PyCharm, VS Code

Projects

Dynamic Apparel Design System with AI and Style Transfer

Jan 2024 - Feb 2024

- Built an AI-powered apparel design system using Python, TensorFlow, VGG19, and DeepLabV3+ for style transfer, generating 10 custom garment images per input for enhanced personalization.
- Achieved 12.41 dB PSNR with structural preservation through 5 custom loss functions, producing realistic outputs for virtual try-on platforms.
- Increased e-commerce engagement by 30

Comparative Analysis of Neural Models for Poetry Generation

Aug 2023 - Oct 2023

- Evaluated Bi-LSTM, Vicuna-1B, and GPT-2 models using Python, PyTorch, and NLTK for poetry generation, measuring performance with BLEU and ROUGE metrics.
- Enhanced model accuracy with genre-specific prompts and qualitative analysis, contributing to AI-driven creativity research.
- Improved poetic output quality, advancing AI in automated literary applications.

Multi-Scale Respiratory Sound Classification System

Apr 2024 - Jun 2024

- Developed a respiratory sound classification system using Python, scikit-learn, MLP, and Random Forest models, achieving 85
- Engineered 330 features across multiple scales for anomaly detection, optimizing the model for telemedicine use on a dataset of 6,895 cycles from 126 patients.
- Improved robustness with cross-validation and data balancing techniques, tailoring the model for health diagnostics.

Publications

- **Comparative Study of Low-Light Image Enhancement Performance: DCE-Net vs. MirNetv2**
- **Abstract:** Published at EEE ICETITE 2024, comparing DCE-Net and MirNetv2, showing DCE-Net's superior contrast and brightness.
- **Comparative Performance Analysis of Neural Architectures for Poem Generation**
- **Abstract:** Authored at ICONCEPT 2024, assessing Bi-LSTM, Vicuna-1B, and GPT-2 for poetry generation using BLEU and ROUGE scores.

Certifications

- **Great Learning:** Java Programming - 2024
- **Coursera:** Emotional Intelligence - University of Michigan - 2023
- **Great Learning:** UI / UX for Beginners - 2024
- **Simplilearn:** Introduction to Data Analytics Course - 2024

Awards and Achievements

- **Second Place in Web Design** *March 2023*
 - Secured 2nd place in the national-level hackathon 'Tantrosav' at Amrita Vishwa Vidyapeetham.
- **First Place in Football (Intra-Level Competition)** *Jan 2023*
 - Won 1st place in the intra-level football competition at Amrita Vishwa Vidyapeetham.