Maruri Sai Rama Linga Reddy

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EDUCATION

Vellore Institute of Technology

Andhra Pradesh, IN

Bachelor of Technology in Computer Science and Engineering | GPA: 8.24/10

Sep 2022 - Aug 2026

Projects

SpaceX Booster Landing Prediction

Feb - Apr 2025

- Built and deployed a machine learning model to predict SpaceX booster landing success using a dataset of over 10,000 flight records, along with environmental and historical data.
- Achieved 88% accuracy with the Decision Tree model, outperforming other algorithms by up to 7%.
- Performed data preprocessing, feature selection, and hyperparameter tuning, resulting in a 15% reduction in model overfitting; evaluated models using cross-validation and performance metrics such as accuracy, precision, recall, and F1-score.

Technologies: Python, scikit-learn, Decision Tree, Matplotlib, Pandas, NumPy

Integrated AI Text Assistant

Jan - Mar 2025

- Developed a web app with secure authentication, Razorpay gateway, and AI features (T5 text summarization, OpenAI chatbot).
- Engineered a scalable architecture utilizing Node.js, Express, and MongoDB, HTML/CSS/JavaScript, which accelerated performance by 30%.
- Implemented speech-to-text functionality and tested with ThunderClient, ensuring 99% uptime.

Technologies: HTML, CSS, JavaScript, Node.js, Express, MongoDB, Razorpay, Python, OpenAI API, Thunder Client

Bone Fracture Classification

Feb - Mar 2025

- Implemented PyTorch model using WideResNet to classify bone fractures in X-rays, achieving 92% accuracy.
- Applied data augmentation to enhance generalization, reducing overfitting by 20%.
- Visualized performance with Matplotlib and Seaborn, reducing misclassification by 15%.

Technologies: Python, PyTorch, WideResNet, Matplotlib, Seaborn

Customer Churn Prediction

Sep - Nov 2024

- Developed a large-scale system design for a churn prediction model using Random Forest and machine learning techniques, achieving 99% accuracy on 100,000+ records, reducing churn by 25%.
- Reduced dataset noise by 15% through EDA and preprocessing to improve model reliability.
- Visualized insights with Pandas and Seaborn, enhancing customer retention strategies by 30%.

Technologies: Python, Random Forest, scikit-learn, Pandas, Seaborn

School Management System

Sep - Oct 2024

- Engineered a centralized system designed for scalability and storage solutions utilizing Python and SQL to manage student and staff records, decreasing administrative tasks by 40% and increasing data accessibility across departments.
- Revamped data storage architecture using MySQL, decreasing query response times by 60% and enabling faster data search and information retrieval for critical student and staff management processes.
- Optimized GUI with Tkinter, cutting user training time by 20%.

Technologies: Python, Tkinter, MySQL

Technical Skills

Programming Languages: Java, Python, C++, JavaScript, MySQL, Node.js Generative AI & LLMs: GPT, BERT, T5, OpenAI API, Hugging Face Transformers

Machine Learning Algorithms: Deep Learning, Supervised Learning, Unsupervised Learning, Reinforcement Learning

AI/ML Tools: TensorFlow, PyTorch, Keras, scikit-learn, NumPy, Pandas, Seaborn

Web Development: MERN Stack, Frontend

DevOps/Cloud: AWS, Git, Docker, Azure, Terraform (learning)

Tools & Platforms: VS Code, Google Colab, Tableau (beginner), Power BI (beginner), NoSQL Databases, Thunder Client Coursework: DSA, Operating Systems, OOP, Software Engineering (Design Patterns), DBMS, Computer Networks

CERTIFICATIONS

AWS Certified: Cloud Practitioner

Oracle Certified: Generative AI Professional

AWS Academy: Cloud Foundations, Cloud Architecting

Microsoft Certified: Azure Data Fundamentals

Coding Ninjas : Python, Java, Data Structures & Algorithms, Data Science & Machine Learning Coursera : Meta - Introduction to Databases, IBM - Machine Learning with Python

EXPERIENCE

Photon Club, VITAP University

Andhra Pradesh, IN

Administrator

Feb 2024 - Apr 2025

- Operated workshop and mentored 50+ students, boosting engagement and skill development.
- Drove a 15% increase in VTAPP membership by managing marketing strategies for two major events, enhancing the organization's visibility and attracting new members through targeted outreach initiatives.