

# NAGAVARAPU DIVYA CHARITHA

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## Education

### Vellore Institute of Technology

BTech in Computer Science Engineering - CGPA - 8.09\*

2021 - 2025

Chennai, Tamilnadu

### Narayana Junior College

AP State Board of Intermediate Education.- Percentage - 92.9%

2019 - 2021

Nellore, Andhra Pradesh

### The Pragathi Maha Vidyalaya School

AP State Board of Secondary Education- GPA - 9.7

2018 - 2019

Nellore, Andhra Pradesh

## Projects

### Prediction of Knee Osteoarthritis Severity From X-rays | [Git Repo](#) November 2023 – March 2024

- Engineered an ensemble model integrating EfficientNet and DenseNet to classify knee osteoarthritis severity from X-ray images, achieving 94.76% classification accuracy.
- Implemented advanced preprocessing techniques, including CLAHE and data augmentation, resulting in a 20% improvement in dataset quality and enhanced model performance.
- Enhanced diagnostic accuracy and reliability, reducing misclassification by 25% in knee OA severity prediction, offering critical insights for clinical decisions.

### Interactive Excel and Power BI Dashboards

September 2024 – October 2024

- Developed an Excel dashboard to analyze Coca-Cola USA retailer data for performance insights.
- Created an interactive Power BI dashboard with DAX measures and slicers to visualize online sales KPIs (revenue, top products, region-wise trends), driving strategic business decisions.

### Movie Booking System | MERN Full Stack |

September 2023 – October 2023

- Developed a MERN stack-based movie booking system with real-time ticket confirmation, handling 100+ users efficiently.
- Optimized UI/UX for customers and admins with seamless CRUD operations, reducing booking time by 40% and manual workload by 50%.

### Hospital Management System | Java, MySQL |

May 2024 – June 2024

- Designed a Java application with MySQL database integration to streamline patient and doctor data management, enhancing data accessibility and ensuring real-time updates for a medical institution, reducing administrative errors by 25%.
- Spearheaded the implementation of key features: patient registration, real-time patient and doctor profiles, and appointment scheduling with active date validation, resulting in a 35% increase in patient bookings. %.

## Publications

- Nagavarapu divya, charitha, et al. "Prediction of Knee Osteoarthritis Severity from X-Ray Images Using Ensemble Learning." 2024 5th International Conference on Intelligent Communication Technologies and Virtual Mobile Networks (ICICV). IEEE, 2024.

## Technical Skills

**Programming Languages:** Python, Java

**Data Analysis:** Excel (pivot tables, formulas, data cleaning) and Power BI (data visualization, dashboards, reporting)

**Web Development:** HTML, CSS, Bootstrap, JavaScript, React.js, Git

**Databases:** MYSQL, MONGODB

**Cloud Technologies:** AWS

**Coursework:** OOPs, Data Structures and Algorithms, Operating Systems, Computer Networks, Database Systems

## Certifications

- AWS Cloud Practitioner [[View Certificate](#)]
- MERN Full Stack, Ethnus Codemithra [[View Certificate](#)]

## Extracurricular activities

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### National Service Scheme (NSS)

VIT Chennai

- Led a beach cleaning initiative, removing 10 kg of plastic waste from local shores to raise environmental awareness and improve community health.
- Organised a 7-day special camp focused on social service, assisting local communities.