

Sudha Rani Chennakesavula

B.Tech - (2022-26)

Computer Science and Engineering

Vignan's Nirula Institute Of Technology and Science for Women

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[Linkedin](#) | [GitHub](#)

CAREER OBJECTIVE

Passionate Software Development Engineer focused on building scalable, high - performance applications. Eager to grow in innovation-driven teams and contribute through clean code, problem-solving, and modern technologies.

EDUCATION

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
B.Tech. CSE	Jawaharlal Nehru Technological University, Kakinada	8.87	2022-present
Senior Secondary	BIEAP	93.4%	2020-22
Secondary	SSC Board	97%	2020

EXPERIENCE

IOT Internship , IOT

June 2024 – July.2024

- Gained hands-on experience in applying IoT technologies to real-world infrastructure challenges.
- Designed real-time applications using sensors, microcontrollers, and automated control systems.
- Strengthened skills in embedded systems, data processing, and real-time IoT decision-making.

Software Engineer Intern, IBM

May. 2024 - Jun. 2024

- Developed ML models using clustering, decision trees, and linear estimators.
- Built data pipeline using Scikit-learn and pandas
- Optimized classification/regression models with higher precision and F1-score.

PROJECTS

Smart Bridge – Automatic Height Adjustment during Natural Calamities

June. 2024 - July. 2024

self-lifting smart bridge for flood-prone zones.

[GitHub](#)

- Developed a smart bridge system that automatically adjusts its height based on floodwater levels using IoT components like NodeMCU ESP8266, servo motors, and rain/moisture sensors.
- Implemented real-time monitoring and actuation logic using Arduino IDE and Embedded C to enhance infrastructure resilience, safety, and automation during natural calamities.

Python To-Do List with Tkinter GUI

May2025 – Jun.2025

C Smart App for organizing daily tasks.

[GitHub](#)

- Developed a user-friendly interface to create, update, and track daily tasks with real-time interactivity. Focused on seamless user experience and functionality for efficient personal task organization.
- Implemented dynamic features like task completion, deletion, and list management to enhance productivity.

Customer Segmentation for E-Commerce Marketing using K-Means Clustering

July 2025

ML-Powered Web App Developer

[GitHub](#)

- Developed a full-stack Django web application for customer segmentation using PCA and K-Means clustering
- Implemented CSV upload, persona generation, churn prediction, and product recommendation features with real-time visual insights
- Enabled e-commerce platforms to apply data-driven strategies for personalized marketing and improved customer retention.

TECHNICAL SKILLS

- **Programming:** Python , Java , C .
- **Development:** HTML, CSS, React JS, Node JS, Type Script, Django, Spring Boot.
- **Databases:** MySQL
- **CS Subjects:** Data structures and Algorithms, OOPs concepts.
- **Tools :** Notepad , Jupyter Notebook , Git.

RESEARCH CONTRIBUTIONS

Credit Card Fraud Detection Using Machine Learning Algorithms

- Published a research paper titled “*Credit Card Fraud Detection Using Machine Learning*” in JETIR, October 2024. The study compared various machine learning algorithms, including Logistic Regression, Decision Trees, Random Forest, and Neural Networks, for detecting fraudulent credit card transactions. It involved data preprocessing, feature engineering, and evaluation using metrics such as precision, recall, F1-score, and ROC-AUC. The findings highlighted Random Forest as the most effective model for real-time fraud detection applications. [\[Review\]](#)

CERTIFICATIONS

NPTEL : The Joy Computing Using Python	Jul 202 - Oct 2023
APSSDC : Data Science Using Python	Jun 2024
EDX : Introduction to Data Science with Python	Jun 2024
Infosys : Pragathi Path to Future – Cohert -3	Dec 2024 - Mar 2025
EduNet Foundation : Sentiment Analysis	May 2024 - Jun 2024
Purple Technologies: Internship on Internet Of Thing	Jun 2024 – Jul 2024