

# PEDASINGU SANJANA

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## Career Objective

A highly motivated and detail-oriented Computer Science student with a strong foundation in software development and AI. Seeking an opportunity to apply technical, problem-solving, and leadership skills in building innovative solutions that contribute to team success and business value.

## Skills

### Core Skills

- **Languages:** Python, C
- **Web Technologies:** HTML, CSS, JavaScript
- **Frameworks/Tools:** VS Code, GitHub
- **Databases:** SQL
- **Packages:** MS-Office
- **Operating Systems:** Windows

### Soft Skills

Problem Solving, Communication, Time Management, Leadership

## Education

### B.Tech in Computer Science and Engineering

Seshadri Rao Gudlavalleru Engineering College, Gudlavalleru  
Expected Graduation: 2026

CGPA: 8.86

### Intermediate (MPC)

Saraswathi Junior College, Ongole, India

Percentage: 87.6

## Projects

### Predicting AI Tool Usage Patterns 📊

*SQL Server, Orange Data Mining, Data Mining, OLAP*

Developed a data mining and OLAP-based analytical system to predict AI tool usage patterns using survey data. Designed Star, Snowflake, and Fact Constellation schemas in SQL Server for multi-dimensional analysis, performed OLAP operations (roll-up, drill-down, slice, dice, pivot), and applied classification models in Orange Data Mining Tool. Achieved highest accuracy (78.4%) using Random Forest, enabling actionable insights into AI tool adoption trends.

### SmartSDLC – AI-powered Software Development Assistant 📊

*Python, FastAPI, Streamlit, Hugging Face, PyMuPDF*

Automated SDLC tasks like requirement classification, code generation, bug fixing, and test creation. Integrated Hugging Face models with Groq API fallback and built an interactive UI with PDF parsing and chatbot support.

### AQI Prediction Model 📊

*Python, Pandas, NumPy, scikit-learn, Joblib*

Built a Random Forest Classifier to predict air quality status from country & AQI values. Implemented label encoding, evaluated performance, and saved model & encoders for deployment.

## Achievements

- **Awarded Mentor Certification** by ELT Center, Seshadri Rao Gudlavalleru Engineering College (2023)
- **Reliance Foundation Scholar** – based on merit and academic excellence (2022)