

Rudri Jani

Indian Institute Of Technology, Jodhpur

Pre-Final Year | Computer Science Engineering

✉ rudrijaniiii@gmail.com | 📞 999 821 0826 | **in** Rudri Jani | LeetCode | 🌐



EDUCATION

IIT JODHPUR

B.TECH IN COMPUTER SCIENCE
AND ENGINEERING

SENIOR SECONDARY SCHOOL

RMG MAHESHWARI ENGLISH

ACADEMY

2022 | Surat, India

Percentage: 91.20

SECONDARY SCHOOL

HILLS HIGH SCHOOL

2020 | Surat, India

Percentage: 95.60

SKILLS

PROGRAMMING

C • C++ • Python

• Verilog • MySQL • JavaScript

• Neo4j

WEB DEVELOPMENT

HTML • CSS • ReactJS

NodeJS • REST API

OTHERS

Numpy/Pandas/Scikit-Learn

• Git/Github • Solidworks • MIPS

COURSEWORK

UNDERGRADUATE

Introduction to Computer Science

Software Engineering

Cloud Computing

Graphics Designing

Data Structures and Algorithms

Pattern Recognition and Machine

Learning

Database Management Systems

Operating Systems

Computer Architecture

Design and Analysis of Algorithms

Principles of Programming Languages

Probability, Statistics and Stochastic

Processes

Mathematics For Computing

Foundations of Quantum Information

PROJECTS

GENERIC DATA ENCRYPTION MODULE | Java, Spring Boot, Redis,
Aspect programming, Microservices, REST API, Design patterns, Postman

- Developed a **generic data encryption service** using **AES-256** and **RSA-2048**, ensuring **100% encryption reliability** and optimizing session management.
- Designed a **reusable library** and a **custom annotation framework**, reducing encryption integration time by **50%** with plug-and-play capabilities.
- Implemented a **client service** supporting **10+ APIs**, automating encrypted responses with a **70% reduction** in manual coding effort.

NUTRITIONAL ANALYSIS SYSTEM | JavaScript, NodeJS, MySQL

Mentor: Dr.Romi Banerjee

- Developed a **web application** using **JavaScript**, **NodeJS**, and **MySQL** for personalized **nutritional breakdowns**, following comprehensive **software development principles**.
- Employed **microservice architecture** and utilized **NLP API** to analyze **food data**, presenting results in a **user-friendly interface**.
- Created a detailed **SRS document**, performed **testing**, and ensured efficient data handling with **MySQL**.

MUSIC GENRE CLASSIFICATION | ML, Librosa

Mentor: Dr.Anand Mishra | 🌐

- Developed a **machine learning model** in **Python** using **Librosa** to classify music genres from **1,000 audio files** in the **GTZAN dataset**, extracting **96 features** through spectrogram and metadata processing.
- Applied **PCA** and **LDA** for dimensionality reduction, decreasing feature dimensions by **50%**, and trained models using **Decision Tree**, **KNeighbors**, **XGBoost**, and **Ensemble Methods**, achieving **75% accuracy**.
- Processed data efficiently and leveraged **scikit-learn** to optimize training pipelines for scalable classification performance.

MINIMUM COST METRO NAVIGATION SYSTEM | C++, DSA, OOPS

Mentor: Dr.Gaurav Harit | 🌐

- Developed a **metro route map** application in **C++** using **DSA** and **OOP** principles for scalability.
- Represented **50+ metro stations** as nodes in an **AVL tree**, enabling efficient **minimum fare path** calculations with **O(log n)** query time.
- Added dynamic features to **rebuild the map** and restore the **minimum interchange path**, reducing update complexity by **30%**.

POR AND ACHIEVEMENTS

- **Led the team** selected among the top teams at the institute level in **SIH'24**
- Achieved (**AIR 3626**) in **JEE Advance 2022** and **99.54 percentile (AIR 4222)** in **JEE Mains 2022**.
- **Head of Publicity and Media** for **Prometeo'25** (Annual Technical Fest of IIT Jodhpur)
- **Assistant Head of Technical Events** in **Prometeo'24** (Annual Technical Fest of IIT Jodhpur)
- Represented **IIT Jodhpur** in **Inter IIT Sports Meet 2023 (Basketball Team)**
- **National Kabaddi Player** - Clusters organised by **CBSE**