



## EDUCATION

Year	Degree	Institute	CGPA/Marks
2027	B.TECH 4Y	IIT Kharagpur	8.65 / 10
2023	Board of Intermediate Education, Andhra Pradesh, India	Narayana Junior College	97.4%
2021	Board of Secondary Education, Andhra Pradesh, India	Narayana E.M High School	100%

## PROJECTS

## Hassler Device | Prof. Chirag Kalelkar

Feb' 25 – Present

- Working with a selective amplifier circuit for loud voice detection using the **MAX9814** microphone with AGC for consistent audio levels
- Implemented an **LM358** operational amplifier with a low-pass filter (**2 kHz cutoff**) to effectively filter out unwanted high-frequency noise
- Utilized Voltage Comparator to filter the signal and another LM358 to drive the **7555 timer** based Voltage-Controlled Oscillator (VCO)
- The VCO generates a **4.2 kHz** squeal upon detecting a loud voice, with the output delivered through a speaker for real-time indication

Sentimental Analysis using NLP | [Link](#)

Feb' 25

- Developed a Twitter hate speech classification tool, achieving **94.7%** accuracy with Support Vector Machine boosting model precision
- Preprocessed and **tokenized** data by removing patterns, special characters, and normalized text using **stemming** with the **NLTK** library
- Performed feature extraction with **Count Vectorizer** and analyzed frequent words in tweets using **WordCloud** to visualize key terms
- Used **Logistic Regression**, **Support Vector Machine**, and **Decision Tree** models with accuracies of 94.6%, 94.7%, and 92.8% respectively

Sudoku Game | [Link](#)

Dec' 24

- Developed an interactive Sudoku game and solver using **C++** and allowing users to play or input puzzles for automated solving
- Implemented **backtracking algorithms** to solve complex puzzles like Sudoku by systematically exploring and validating solutions
- Strengthened logical thinking and algorithmic problem-solving abilities through hands-on development and implementation

## SKILLS AND EXPERTISE

**Programming Languages:** C | C++ | HTML | CSS | Python | Machine Learning | NLP**Software:** VS Code | GitHub | SOLID WORKS**Libraries and Frameworks:** NumPy | Pandas | scikit-learn | NLTK

## AWARDS AND ACHIEVEMENTS

- Secured an All India Position in the top **2.5%** among 1,80,000 candidates in JEE Advanced 2023
- Secured an All India Position in the top **0.17%** among 9,00,000 candidates in JEE Mains 2023
- Secured an Position in the top **0.12%** among 2,00,000 candidates in TS EAMCET 2023

## COMPETITIONS

## Open IIT Case Study Competition

- Collaborated with my team to secure **2nd place** by contributing and ensuring effective team work and strategy execution
- Conducted a detailed case study on **QPO Cabs**, focusing on market entry strategies and customer acquisition
- Analyzed competitor strategies, customer needs to recommend growth opportunities in the competitive cab service market

## COURSEWORK

**Computer Science:** Programming and Data structures**Mathematics:** Linear Algebra, Numerical and Complex Analysis | Advanced Calculus | Probability and Statistics**E&ECE:** Analog Circuits | Network Theory | Semiconductor Devices | Digital Electronics Circuits | Linear Algebra and Optimization models | Signals and Systems | Systems and Control | Electromagnetic Engineering

## EXTRA CURRICULAR ACTIVITIES

## National Service Scheme (NSS) Volunteer

- Contributed to community development, social welfare initiatives, and enhanced leadership skills
- Contributed to educational initiatives by tutoring **more than 30** underprivileged children and promoting literacy programs
- Gained valuable skills in teamwork, leadership, community outreach, and social impact initiatives
- Engaged in the NSS Annual Camp, contributing to **10+** impactful community activities, including sanitation and awareness campaigns

## POSITIONS OF RESPONSIBILITY

## Associate Member | Spring Fest, Indian Institute of Technology Kharagpur

Sep'23 - May' 24

- Contributed to organizing **60+ cultural and musical events** at one of India's largest student-run festivals, attended by **20,000+ participants**
- Played a key role in promoting the fest, engaging with participants from **150+ colleges** across India
- Strengthened leadership, teamwork, and organizational skills through active participation in the festival's execution
- Contributed to event planning, coordination, and logistics to ensure the seamless execution of multiple activities

## Associate Member | Shaurya, Indian Institute of Technology Kharagpur

Aug'23 - May'24

- Collaborated with the design team to create engaging promotional material for Shaurya, IIT Kharagpur's annual sports festival
- Designed visually engaging content, banners that boosted event visibility and attracted **1,000+ participants**
- Worked closely with other teams to ensure branding consistency across all event communications