

# Venkatesh Manupati

✉ manupati364@gmail.com

☎ 8341892015

📍 Kurukshetra, Haryana

🌐 [linkedin.com/in/manupativenkatesh-ece5029](https://www.linkedin.com/in/manupativenkatesh-ece5029)

🐙 [github.com/VenkateshNni](https://github.com/VenkateshNni)

## Education

---

12/2021 – 05/2025      **B.Tech in Electronics and Communication Engineering**  
NIT Kurukshetra,    CGPA:7.2112

2019 – 2021              **Intermediate (Class XII)**  
Balanagar              TTWR Junior College (Boys).

## Skills

---

**Programming & Database Management** — SQL, Python, JavaScript, HTML, CSS, Git, MySQL, .NET

**Software Development** — Object-Oriented Programming (OOP), Problem-Solving, Machine Learning

**Tools & Platforms** — Visual Studio, GitHub, Jupyter Notebook, Tableau

**Soft Skills** — Analytical Thinking, Communication, Team Collaboration, Adaptability

## Projects

---

### Million Songs Dataset Analysis using Python | Recommendation Engine

- Developed a hybrid music recommendation engine using the Million Songs Dataset, combining **popularity-based** and **item-based collaborative filtering** techniques.
- Engineered features by merging user interaction and metadata, and constructed unique song identifiers (title + artist).
- Implemented an **item-based recommender** using a co-occurrence matrix to identify and rank similar songs based on shared user behavior.
- Encapsulated logic in reusable Python classes, demonstrating proficiency in **object-oriented programming**, **matrix operations**, and scalable data pipelines

### GNSS Jamming Detection using Deep Learning

- Designed and implemented a deep learning model to detect jamming in GNSS signals.
- Collected and preprocessed signal data for both jammed and normal conditions.
- Extracted key features using spectrogram and time-frequency analysis techniques.
- Built and trained a Convolutional Neural Network (CNN) for binary classification.
- Achieved ~95% classification accuracy with robust model tuning and validation.
- Tools used: Python, TensorFlow/Keras, NumPy, Matplotlib, Scikit-learn

## Certificates & Achievements

---

- Databases for Developers: Foundations-Oracle
- Career Essentials in Data Analysis by Microsoft and LinkedIn
- National Cadet Corps (NCC) 'A' Certification
- Tata Data Visualisation: Empowering Business with Effective Insights Job Simulation on Forage

## Declaration

---

I hereby declare that the information provided above is true and correct to the best of my knowledge and belief.

---

Venkatesh Manupati