Nandan Rathod

Ballari, Karnataka | nandan07381@gmail.com | +91 8792690541 | Nandan Rathod

EDUCATION

Ballari Institute of Technology and Management
BE Computer Science
CGPA: 9.02/10
YOG: 2026

PROJECTS

Sign Language Detection using American Sign Language

Technologies used: Python, OpenCV, TensorFlow, NumPy and Sequential model (SNN).

- Developed a real-time Sign Language Detection system using Machine Learning techniques
- Implemented computer vision to capture and process hand gesture images
- Used Python and OpenCV for image preprocessing and gesture recognition
- Trained a Convolutional Neural Network (CNN) model for accurate classification of sign gestures
- Converted recognized gestures into readable text output for user understanding
- Created a custom dataset using a webcam for training and testing
- Improved communication accessibility for hearing- and speech-impaired individuals
- Tested the system under different lighting conditions to enhance accuracy

Cafeteria Food Ordering System

Technologies Used: Python, MySQL, PHP**,** HTML, JavaScript.

- Developed a digital ordering system for a cafeteria to streamline food ordering and reduce wait times.
- Implemented features such as menu browsing, order placement, and payment processing.
- Designed a user-friendly interface to enhance customer experience.
- Integrated a database to manage orders and track inventory efficiently

Mental Health Chatbot

Technologies used: Python, HTML, CSS

- Developed an AI-based chatbot using Python and NLP to provide mental health support and emotional wellness tips.
- Integrated sentiment analysis to detect user emotions and respond empathetically in real time.
- Enabled 24/7 anonymous support with predefined and dynamic conversation flows using a rule-based or ML approaches

LEADERSHIP AND AWARDS

Head Boy (School)

- Chosen by the student body through a voting process, reflecting trust and leadership qualities.
- **Best Student Leader Award** – Recognizing exceptional leadership as Head Boy.

Scouts Captain

- Attended **National Level Scouts Camps**, gaining advanced training and leadership experience.

SKILLS AND INTERESTS

Programming Languages: C, Python, Java, SQL, HTML, CSS, JavaScript, PHP.

ACHIEVEMENTS AND CERTIFICATIONSs

- Internship on python programming by WZTS.
- Participated certificate – InduriAI 24hours hackathon in IIT Madras.
- Certificate of Appreciation for organizing and coordinating Chakravyuha, a state-level technical fest, awarded by the Dept. of MCAs
- Python with DSA completion certification