M RITHICKA

rithicka030504@gmail.com 9940102541 LinkedIn GitHub LeetCode

EDUCATION

Bachelor of Technology - Computer Science and Engineering 2022 – 2026
SRM Instituite of Science and Technology CGPA - 9.23

Higher Secondary 2020 – 2022
SBOA School and Junior College 10^{th} - 96% | 12^{th} - 72.2%

SKILLS

Technical Skills
- Programming Languages - Python
- Web Develepment - HTML, CSS, JavaScript
- CS Fundamentals - Data Structure and Algorithm, DBMS, OOPS, SQL, Operating Systems, Computer Networks, Machine Learning, Aritificial Intelligence, Computer organization and Architecture
- Frameworks & Libraries - Numpy, Pandas, Scikit-learn, Seaborn, OpenCV/cv2, SQLite3, DeepFace, Mediapipe, Matplotlib, Tensorflow, Keras, Streamlit, FastAPI, React.js

Soft Skills
- Leadership
- Public Speaking
- Time Management
- Communication
- Problem Solving
- Teamwork
- Critical thinking
- Networking
- Risk Assessment

TECHNICAL EXPERIENCE

Data Science Intern | D4 Insight Pvt. Ltd. 2025
- Engineered an app named Intellextion, a web-based AI knowledge companion that ingests PDFs, GitHub repos, and URLs, providing semantic search, summarization, and document-based Q&A using FastAPI, React, and HuggingFace models.
- Attained hands-on experience in AI application development, including backend APIs, frontend interfaces, database management, and deploying NLP models in a professional work environment.

PROJECTS

Song For Emotion Tool [Python | Streamlit | FastAPI | OpenCV | DeepFace | Mediapipe] 2025
- Developed an AI-powered emotion recognition and music recommendation platform leveraging Python, OpenCV, DeepFace, and Mediapipe to capture and classify real-time facial expressions via webcam.
- Connected Spotify API with Streamlit and FastAPI to dynamically generate personalized playlists, demonstrating expertise in computer vision, deep learning, affective computing, and end-to-end full-stack AI application development

Image Compression App [Python | Tenserflow | Streamlit | NumPy | Matplotlib | SQLite3] 2025
- Created a secure, deep learning–based image compression system using Multi-Stage Convolutional Autoencoders trained on CIFAR-10, achieving up to 85% compression while maintaining PSNR above 30 dB for high visual fidelity.
- Integrated adaptive quantization, intelligent format selection and a dual-layer cryptographic security framework with a Streamlit interface and SQLite backend, ensuring efficient storage, robust data protection, and scalable real-world deployment.

Music Trend Prediction Using ML [Python | pandas | seaborn | cv2 | scikit-learn | Keras] 2024
- Designed and implemented a machine learning-based music trenD prediction system leveraging Python, TensorFlow/Keras, Scikit-learn, and Pandas to analyze audio features, streaming data, and listener behavior for forecasting emerging genres and song popularity.
- Built and optimized predictive models including LSTM architectures with sentiment analysis and real-time data integration, achieving high accuracy in identifying future music consumption patterns.

EXTRA-CURRICULAR ACTIVITIES

Volunteering 2024
- Volunteered in a clinical environment, supporting hospital staff in non-clinical tasks and improving patient interaction and administrative flow.
- Gained exposure to orthopedic medical practices, patient care protocols, and hospital operations, fostering empathy and responsibility in a healthcare setting.

Student Parliament: Member 2019-2020
- Served as a student representative in the school parliament, voicing the concerns and ideas of over 10,000 individuals in administrative discussions and activity planning.
- Contributed to initiatives for enhancing the student experience by supporting improvements in academic programs, expanding extracurricular opportunities, and upgrading campus facilities.

CERTIFICATIONS

Python for Data Science - NPTEL 2025

Natural Language Processing for developers - Infosys Springboard 2025

Introduction to Machine Learning - NPTEL 2024

Database and SQL - Infosys Springboard 2024