A.R. KEERTHANA

Chennai, India
arkeerthana2004@gmail.com ◇ +91 6374556130 ◇ linkedin.com/in/keerthana4444 ◇ github.com/keerthana777z

OBJECTIVE

Computer Science Engineering student specializing in Artificial Intelligence and Machine Learning, with hands-on experience in building and deploying ML solutions for real-world problems.

EDUCATION

Vellore Institute of Technology, Chennai 2022 – 2027
Integrated M.Tech – Computer Science Engineering (Business Analytics)
CGPA: 8.27 / 10

D.A.V. Group of Schools 2021 – 2022
Class XII (HSC)
Percentage: 88.8%

TECHNICAL SKILLS

Programming Languages: Python, R, Java, SQL, NoSQL
Machine Learning / AI: Machine Learning, Deep Learning, NLP, Computer Vision
Frameworks & Libraries: PyTorch, TensorFlow, Keras, Scikit-learn, OpenCV, Pandas, NumPy, Matplotlib
Tools & Platforms: Docker, Flask, React, Streamlit, Git, GitHub, Tableau, Power BI
Cloud Computing: AWS (Basics)
Databases: MySQL, MongoDB, Neo4j
Concepts: Model Deployment, CI/CD, Data Preprocessing, Feature Engineering

INTERNSHIP EXPERIENCE

Data Science Specialist Intern June 2024 – August 2024
GUVI Geek Network Pvt. Ltd. (IIT Madras Research Park), Chennai

- Designed and developed end-to-end machine learning and deep learning projects for educational and production use cases.
- Curated and preprocessed real-world datasets for NLP and computer vision applications to improve model performance.
- Managed the complete machine learning lifecycle including data preprocessing, model training, evaluation, optimization, and deployment.

PROJECTS

Graph-Based Drug Repurposing Recommender System

- Developed a Graph Neural Network (GNN) model using molecular graph representations to predict novel drug–target interactions.
- Constructed a Neo4j-based knowledge graph to model complex drug–target relationships and improve interpretability.
- Achieved 84% accuracy and 0.84 F1 score through supervised link prediction and systematic evaluation.

Tech: PyTorch Geometric, Neo4j, RDKit, Python

Precedent-Aware Legal Verdict Generator

- Built an LLM-based system to analyze historical legal precedents and predict verdict outcomes using transformer-based NLP.

- Improved contextual reasoning by fine-tuning transformer models on domain-specific legal datasets.
- Achieved 0.87 F1 score by grounding predictions on relevant precedents to reduce hallucinations.

Tech: Transformers, Hugging Face, NLP, Python

Multimodal Parkinson's Disease Classification

- Designed a three-stream CNN–LSTM architecture integrating handwriting, gait, and speech modalities.
- Improved diagnostic accuracy compared to single-modality baseline models using multimodal feature fusion.
- Achieved 80% precision through optimized multimodal learning strategies.

Tech: TensorFlow, Keras, OpenCV, Python

AI-Based Dark Pattern Detection System

- Developed a BERT-based NLP model to detect deceptive user interface text patterns.
- Classified eight dark-pattern categories with 97.5% accuracy and 0.95 F1 score.
- Integrated Selenium to extract dynamic UI text from live websites for real-time analysis.

Tech: BERT, Transformers, Selenium, Streamlit, Python

CERTIFICATIONS

Building RAG Agents with LLMs – NVIDIA
Fundamentals of Generative AI – GUVI
Machine Learning 101 – GUVI
Java (Intermediate) – HackerRank

ACHIEVEMENTS

Winner – Hack the Horizon (VIT Chennai), ranked 1st among 700+ participants from 25 colleges
3rd Place – Welldoc Hackathon (Bangalore), ranked Top 24 among 400+ participants
Finalist – Myntra HackerRamp 2024, ranked in the top 4% among 29,000+ teams
Smart India Hackathon 2023, selected for second round at college level

LANGUAGES

English (Professional) — Tamil (Native) — Hindi (Working) — French (Working)

INTERESTS

Artificial Intelligence
Machine Learning
Data Analytics
Data Science
AI Engineering
Cloud Computing