Sana Arora

✉ sana28arora@gmail.com   📱 9870344744   🔗 linkedin.com/in/sana-arora-062a47259   ⊙ github.com/sana2810

EDUCATION

B. Tech Computer Science and Engineering
Indira Gandhi Delhi Technical University for Women

11/2022 - Present   *9.42 CGPA till 4th sem*

Senior Secondary
Maxfort School, Dwarka

04/2021 - 03/2022   *CBSE Boards 97%*

PERSONAL PROJECTS

Machine Learning and CNN Projects (01/2024 - 02/2024) ⬈
- EMNIST Dataset: Predicted 92% accuracy with Convolutional Neural Networks on TensorFlow's 28x28 pixel images
- Credit Scoring Model: Attained 100% accuracy using K-Nearest Neighbors and optimized accuracy with other machine learning algorithms and an Artificial Neural Network
- Disease Prediction Dataset: Conducted Exploratory Data Analysis, achieving 100% accuracy with Naive Bayes and KNN, and 97% accuracy with GBDT

CNN on Breast Mass (06/2023 - 07/2023) ⬈
- Deployed CNNs with TensorFlow in a team of 3
- Computed EDA on 569 cell data points, achieving 95.6% accuracy in malignancy detection
- Analyzed breast mass samples, reaching 70% accuracy in image recognition
- Drafted a research paper on the project

No code Chatbot Hackathon ⬈
- Developed a survey chatbot using landbot.io to facilitate student feedback across 9 university departments

WORK EXPERIENCE

Artificial Intelligence Intern
Unifyapps

06/2024 - 07/2024   *Gurugram*

Filter Retrieval Augmented Generation
- Designed a retrieval method integrating the concept of Plan RAG and using RAG to respond to user queries requiring 2 context categorizations including filtering data and then identifying relevant context.
- Implemented filtering in FAISS (Facebook AI Similarity Search) to efficiently index and search a large database of 40,000 data points.
- Applied 4 types of filters by year, month, day, and location, passing metadata for effective filtering.
- Strengthened the performance of the existing language model (LLM) against the new approach, achieving a 6% increase in accuracy.

TECHNICAL SKILLS

Programming Languages: Python

Tools and Frameworks: Jupyter, Spyder, Pycharm, VS Code, Langchain

AI ML: Machine Learning Algorithms, Neural Networks like CNN, ANN, Image Recognition

OOPS: Object-oriented programming in C++/Java

Database Management System: MySQL/Oracle

ACHIEVEMENTS

Highest CGPA in the CSE Dept, IGDTUW in 2nd semester, 9.82

NPTEL Soft Skills Development Topper, among top 5% candidates

Top 11 among the 800+ participants in the No Code Chatbot Hackathon

School Topper of Maths and Science Olympiad, Class XII

Topper in Chemistry and Computer Science Board Exam, Class XII, with a centum in Chemistry

KEY COURSES

5 Course specialization in Deep Learning by Andrew Ng
Neural Networks and Deep Learning, Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization, Structuring Machine Learning Projects. Convolutional Neural Networks, Sequence Models

CSE and Maths
Introduction to C/C++/Python, Object Oriented Programming in C++/Java, Data Structures and Algorithms, Database Management System, Numerical Methods, Discrete Mathematics, Operating Systems

CERTIFICATES

Virtual Internship Program, CodeAlpha ⬈

NPTEL, IIT Kharagpur ⬈

AI ML Internship, Anveshan Foundation and COE-IGDTUW ⬈

Desh ke Mentor, Govt. of NCT of Delhi ⬈

No code Chatbot Hackathon ⬈