Nalish Jain

 $\begin{array}{c} LinkedIn \\ Github \end{array}$

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EDUCATION

Indraprastha Institute of Information Technology Delhi

Bachelor of Technology - Computer Science and Artificial Intelligence; CGPA: 9.86

DAV Public School, Sreshtha Vihar

Bal Bharati Public School, Brij Vihar

CBSE 10th Board; Percentage: 97.6

CBSE 12th Board; Percentage: 98

Delhi, India

Email: nalish21543@iiitd.ac.in

Mobile: +91-807-663-2190

Dec 2021 - May 2025 Delhi, India

Apr 2019 - Mar 2021 Uttar Pradesh, India

Apr 2007 - Mar 2019

SKILLS

• Languages: Python, C++, C, Java, SQL

- Tools & Frameworks: PyTorch, TensorFlow, Keras, Numpy, Pandas, Scikit, NLTK, MySQL, Git, LibGDX, VSCode, IntelliJ IDEA, Figma
- Courses: Analysis and Design of Algorithms, Data Structures and Algorithms, Advanced Programming in Java,
 Operating Systems, Database Management Systems, Statistical Inference, Convex Optimization, Statistical
 Machine Learning, Machine Learning, Deep Learning, Reinforcement Learning, Artificial Intelligence, Natural
 Language Processing, Information Retrieval

EXPERIENCE

Google

• SWE Intern

May 2024 - Aug 2024

- o Project Focus: Gemini fine-tuning for auto-intent prediction.
- Contribution: Built and refined pipelines to create high-quality multilingual training datasets, then fine-tuned the Large Language models and conducted several quality iterations.

Signal Processing and Biomedical Imaging Lab

Undergraduate Researcher

Aug 2023 - May 2024

- o Project Focus: Disease classification of ECG waves using deep learning architectures.
- Contribution: Developed a novel deep learning architecture using a combination of CNN and attention mechanism, resulting in significant performance improvements over state of the art results, also explored semi-supervised learning techniques like fix-match & mix-match.

Applied Solar Technologies

Machine Learning Intern

May 2023 - Jul 2023

- Project Focus: Time series forecasting and anomaly detection of solar panel data.
- Contribution: Using deep learning techniques like transformers, LSTM, and RNN, developed models that accurately predicted solar panel performance and detected anomalies.

Projects

Detrieval

Jan 2024 - May 2024

GPT-3.5, Langchain, Python, Pinecone, ReactJS, RAG, Information Retrieval

Report, Github

Created a web-copilot Chrome extension enabling multimodal retrieval across multiple open tabs using
Pinecone as a vector database and GPT-3.5 for index retrieval and output generation. Integrated a chatbot
interface, RAG pipeline, and real-time web scraping to enhance user experience, providing quick and
context-sensitive responses.

Optimizing Campus Dining

Python, TensorFlow, Scikit-Learn, Machine Learning

Aug 2023 - Dec 2023 Report, Github

• Developed and evaluated machine learning models using a handcrafted dataset to forecast meal sales at IIIT Delhi's dining facilities. Emphasized the importance of feature engineering and encoding techniques, particularly one-hot encoding for menu items, to **optimize resource allocation and minimize food wastage** on campus.

Replication of Dormant Neuron Phenomenon in Flappy Bird Environment

Nov 2023 - Dec 2023

Python, PyTorch, Reinforcement Learning

Github

• Implemented deep Q learning technique to replicate the dormant neuron phenomenon observed in the Flappy Bird environment, achieving results similar to those in the original paper.

Fruit Freshness Classification

Python, Scikit-Learn, TensorFlow, Machine Learning

 $\operatorname{Mar} 2023$ - $\operatorname{Apr} 2023$ Github

• Developed an ensemble machine learning model using Logistic Regression, Random Forest and NNs to classify fruits with high accuracy. Ranked among the **top four teams** in the Kaggle contest.

Tank Wars

Nov 2022 - Dec 2022

Github

Java, LibGDX, Box2D

• Developed a fast moving GUI based clone of the game "Tanks Stars" with customized tanks, weapons and live background in Java using principles of OOPs with the additional functionality of saving games and loading saved games.

CERTIFICATION

• Machine Learning Operations Specialization, DeepLearning.AI

Cerificate Link

Honors and Awards

- Dean's Award of Academic Excellence 2022, 2023 and 2024 for 9+ CGPA.
- Current rank 1 in the batch.
- JEE Advanced AIR: 2365 and JEE Main percentile: 99.86.
- Ranked 173th among 6000+ teams in Amazon ML Challenge '23.

Positions

• DAC Representative, Student Senate	May 2023 - Jun 2023
• Organiser, Preparation for Interview Program	Jan 2024 - July 2024
• Founding Member and Mentor, Undergraduate Research Club	Sep 2023 - Present
• Events OC, RIISE	Jan 2024 - Mar 2024
• Core Member, Training and Placement Cell	Apr 2023 - Mar 2024
Batch Representative Student Council	Jun 2022 - May 2023