# Anshuman

## Education

Manipal Institute of Technology

Technology Commuter Science: CCPA: 8 78

Bachelor of Technology - Computer Science; CGPA: 8.78

Manipal, Karnataka

Precidency Global School

2020 - 2022

Class XII; CGPA: 9.62

Patna, Bihar

2022 - 2026

#### Relevant Coursework

Data StructuresObject-Oriented-

Programming

- Algorithms Analysis
- Database Management
- Digital Design
- Embedded Systems Operating Systems
- Computer Architecture
- Software Engineering

# Experience

# Undergraduate NLP Research Intern

June~2024-July~2024

MIT, Manipal

Karnataka

- Created a model to analyze and visualize the fractal nature of lyrical verses and generate lyrics using advanced NLP techniques and transformer models
- Applied word embeddings (e.g., Word2Vec, Doc2Vec, BERT) and developed/fine-tuned transformer models (e.g., GPT-3, Hugging Face Transformers) for lyrics generation, focusing on specific artists.
- Successfully visualized complex patterns and structures within lyrical data, highlighting their fractal nature using Python libraries such as NLTK, Matplotlib, Plotly, and Hugging Face Transformers

# Data Analyst Intern

December 2024 - January 2025

Alethe Labs

Gurugram, Haryana

- Developed a Corrosion Condition State Classification model using ResUnet with multihead attention, accurately segmenting image pixels into Severe corrosion, Bad, Fair, and Background categories.
- Implemented unsupervised learning models to detect fraudulent bank transactions, enhancing anomaly detection capabilities.

# **Projects**

# Art Generation with Neural Style Tranfer Model |

- Developed a Deep Learning Model using **NST** to generate aesthetically pleasing and contextually significant images in the style of various Impressionism movement artists.
- Used experience with **convolutional neural networks**(CNNs), 19-layer VGG network, pre-trained on the ImageNet database, to recognize and apply low-level and high-level features in the style transfer process.

#### Image Processing Application | Java, CSS, JavaFX

- Developed an image processing application for various image filters, Added functionality to display histograms for image analysis, Integrated image compression techniques to reduce file sizes.
- Utilized Object-oriented programming practices such as inheritance for filters, JavaFX and CSS styling to create an attractive GUI for user to process and edit images etc.

#### Technical Skills

Languages: Python, Java, C, HTML-5, CSS-3, JavaScript, SQL Technologies/Frameworks:Git, GitHub, WordPress, JavaFX

## Leadership / Extracurricular

# ${\bf IAESTE\ Manipal\ (International\ Association\ for\ the\ Exchange\ of\ Students\ for\ Technical\ Experience)}$

 $LC\ member$ 

- Served as a team member, developing strong leadership qualities and honing skills in teamwork and communication.
- Organised Namaste Manipal'23, a flagship event spanning a week with various activities and events, welcoming interns from all over the world.

#### Revels MIT Sponsorship Team (Cultural Fest of MIT)

- Contacted potential sponsors, created sponsorship packages, and negotiated terms for mutually beneficial partnerships by effectively pitching ideas, negotiation and communication
- Secured Sponsorship from Lifestyle, provided clothing and accessories, vouchers and gift cards for Fashion Event