# Nitya Santhosh

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## EDUCATION

VIT Bhopal University

BTech(CSE Health Info), CGPA: 8.72

Bhopal, Madhya Pradesh

Aug 2022 - Ongoing

Kendriya Vidhyalaya

New Delhi

Senior Secondary, CBSE XII percentage: 95.2

June 2021

Kendriya Vidhyalaya

New Delhi

Higher Secondary, CBSE X percentage: 91

March 2019

#### Projects

# COVID-19 Twitter Sentiment Analysis using NLP | Python, NLTK, Tweepy

Sep 2023 – Nov 2023

- Developed an ML and DL-based algorithm to analyze Twitter comments for sentiment classification (positive, negative, neutral)
- Extracted and processed Twitter data specific to the US and Delhi regions
- Generated visual insights through word clouds and sentiment distribution graphs to illustrate trends and patterns

# Diabetic Retinopathy Classification | Python, TensorFlow/Keras, EfficientNetB3

March 2024 – May 2024

- Developed an EfficientNetB3 model to classify retina images into five categories: Healthy, Mild DR, Moderate DR, Proliferative DR, and Severe DR
- Trained the model over 100 epochs, achieving a high classification accuracy of 98.4 %

## Campus Mart AI Bazar (Buy & Sell Platform) | MERN Stack, MongoDB

Sep 2024 – April 2025

- Contributed as a Frontend developer to an AI-based bidding-enabled marketplace for students
- Collaborated on building scalable UI components and integrating them with MongoDB backend
- Gained practical exposure to full-stack workflows using React.js and Node.js

## Experience

#### Semi-Finalist in TATA Elxsi Teliport Season-2

Dec 2024 – Jan 2025

KAVACH- Advanced Drone Security Framework for Preventing Jamming

- Designed and implemented mutual authentication protocols and AES-256 encryption, ensuring highly secure communication and preventing unauthorized access.
- $\bullet$  Developed fails afe mechanisms with cryptographic erasure and Return-to-Home (RTH), reducing connection time out failures by 50 % and enhancing operational reliability.
- Integrated RSSI monitoring, FFT analysis, and FHSS, increasing interference detection accuracy by 40% and achieving exceptional performance in diverse environments.

## CERTIFICATIONS & TRAININGS

#### IBM Full Stack Software Developer Professional Certificate course | Coursera

June 2023

Applied Machine Learning in Python | Coursera

Dec 2023

Master's in Data Science | Intellipat

Sept 2024 – Present

## TECHNICAL SKILLS

Languages: Python, C++, SQL, React.js, Node.js, Express.js, MongoDB

Developer Tools: Git, Google Cloud Platform, VS Code, Visual Studio, IntelliJ, Eclipse, Jupyter, Android Studio,

Power BI, Hadoop

Technologies & Frameworks: Computer Networks, DBMS

Libraries: pandas, NumPy, Matplotlib

#### SOFT SKILLS

Soft Skills: Teamwork, Leadership, Communication, Problem solving, Adaptability, Attention to Detail

Languages: Hindi, English, Malayalam