

## EDUCATION

### Bachelor of Technology in Computer Science and Engineering

Specialization in Data Science and Artificial Intelligence

SRM University, Sonepat, Haryana

Aug 2022 — Present

Current CGPA: 7.55

## SUMMARY

Aspiring AI/ML Engineer with strong expertise in machine learning, deep learning, and data science. Experienced in building end-to-end projects, including NLP and computer vision applications, with a focus on performance, scalability, and real-world impact. Passionate about solving complex problems in collaborative environments and eager to contribute as a Machine Learning Engineer or Data Scientist to innovative AI projects.

## SKILLS

Programming Languages	Python, R, C, C++, SQL, JavaScript
Machine Learning and AI	TensorFlow, PyTorch, Scikit-learn, YOLO, Hugging Face, Deep Learning, NLP, Computer Vision
Frameworks and Deployment	Streamlit, Flask, REST APIs
Data and Visualization Tools	Jupyter Notebook, Google Earth Engine, Pandas, NumPy, Matplotlib, Seaborn
Databases	MySQL, MongoDB, NoSQL
Development Tools	Git, Docker, VS Code, Google Colab
Core Concepts	Data Preprocessing, Model Deployment, MLOps
Communication	English (Fluent), Hindi (Fluent)

## PROJECTS

### Deforestation Detection

Feb 2025 — Jun 2025

[GitHub: Deforestation-Detection](#)

- NDVI and Landsat 8 image data were collected via Google Earth Engine and pre-processed into training-ready formats.
- Designed and trained a U-Net segmentation model in TensorFlow to identify deforested regions from multiband satellite patches.
- Built a Flask web application to visualize historic and predicted deforestation maps, enabling interactive exploration of environmental changes.
- Calculated deforested area statistics to support environmental organizations in near real-time forest monitoring.

### Abstractive Article Summarizer

Sep 2024 — Nov 2024

[GitHub: Abstractive-Article-Summarizer](#)

- Developed a Streamlit app that integrates a fine-tuned BART abstractive transformer for generating human-like summaries from input URLs or article text.
- Activation of Citation Extraction: Automatically identify and list cited references within the summarized content.
- Implemented a 'text-to-speech read-aloud' feature using a TTS library to improve accessibility.
- The app was deployed as Hugging Face Space, providing an interactive user interface and a one-click summarization for the end user.

### Brain Tumor Detection

May 2024 — Jun 2024

[GitHub: Brain-Tumor-Detection](#)

- Pre-processed and augmented 250+ brain MRI scans from a Kaggle dataset.
- Trained a custom CNN in TensorFlow, achieving 88.7% test precision (F1 = 0.88) and 91% accuracy in training.
- Used early stopping and tuning to reduce overfitting; evaluated with accuracy and loss curves.

### Stock Market Sentiment Analysis using Hugging Face

Jan 2024 — Feb 2024

[GitHub: Stock-Market-Sentiment-Analysis-using-hugging-face](#)

- Fetched financial news and tweets related to that main stock market.
- Fine-tuned a BERT model using Hugging Face for sentiment classification and analyzed how public sentiment correlates with stock price movement.
- Graphs of sentiment are visualized trends alongside historical stock data.

## CERTIFICATES & TRAINING

- CS50's Introduction to Artificial Intelligence with Python (CS50AI), Harvard University, 2025
- Amazon Machine Learning Summer School 2025, Amazon