

EDUCATION

Bachelor of Technology in Computer Science and Engineering

Specialization in Data Science and Artificial Intelligence

SRM University, Sonepat, Haryana

Aug 2022 — Present

SUMMARY

Aspiring AI/ML engineer with a strong foundation in artificial intelligence, machine learning, and data science, committed to building impactful, real-world solutions. Experienced in developing end-to-end projects involving natural language processing and deep learning, with a focus on clarity, performance, and innovation. I thrive in collaborative, problem-solving environments and am eager to apply my skills in an entry-level role as a Machine Learning Engineer or Data Scientist, contributing to forward-thinking teams and cutting-edge AI applications.

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, Linux, Docker, VS Code, Google Colab
Core Concepts	Data Preprocessing, Model Deployment, MLOps
Communication	English (Fluent), Hindi (Fluent), German (Basic – A1)

PROJECTS

Navigation and Guidance for the Blind

Nov 2024 — Present

- Developing an AI-powered navigation system that leverages computer vision and deep learning to detect objects and recognize obstacles in real time.
- Using visual input to interpret surroundings and provide audio feedback to assist visually impaired users in safe navigation.
- Focused on real-time environmental understanding, with an emphasis on usability, accessibility, and deployment on edge devices.

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

Feb 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

Feb 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

Feb 2024

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

- Fetches 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.