

Santanu Kumar

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EDUCATION

Veermata Jijabai Technological Institute
BTECH IN ELECTRONICS AND TELECOMMUNICATION
Atomic Energy Central School-4
HSC | 92.2%

Mumbai, India | 2019-2023(expected)

Mumbai, India | 2017-2019

WORK EXPERIENCE

Crux Intelligence (Fractal Analytics)

Mumbai, India | June 2022 – Aug 2022

DATA SCIENCE INTERN

- Worked on the question completion feature of their **data informatics product**.
- Generated **training data** by converting the available raw data into interim templates and **upsampling** them.
- Used the **Hugging Face** library to fine-tune the **Transformer model (GPT-2)** for natural language generation, and evaluated the results using the **Perplexity score** and **n-gram overlapping analysis**.
- Performed regular cleaning and outlier removal on the training data to align with the client's requirements.

PROJECTS

TWITTER-SENTIMENT-ANALYSIS

NATURAL LANGUAGE PROCESSING, SENTIMENT ANALYSIS

Apr 2022 – May 2022

A webapp built to display the sentiments of people regarding any events happening in the world. Cleaned and analysed the incoming tweets, used **textblob** to extract their sentiment, converted them into vectors using **TF-IDF** and fed them into 3 models (**Naive Bayes**, **SVM** and **Logistic Regression**) to compare their accuracy.

AI COVID DETECTOR

DEEP LEARNING, TRANSFER LEARNING, FLASK

Jan 2022 – Feb 2022

Deployed a **flask** webapp for detection of Covid-19 in patients from **Chest Radiography Images (X-RAYS)** using **Xception CNN Architecture** with over **95%** accuracy.

MOVIE RECOMMENDATION SYSTEM

MACHINE LEARNING, PYTHON, RECOMMENDER SYSTEMS

Oct 2021 - Nov 2021

Used **TMDB** dataset of over 5000 movies, preprocessed and created representations using **BOW** and built a **webapp** using to display movie recommendations based on **content based filtering** using **cosine similarity**.

DATA ANALYSIS PROJECTS

EXPLORATORY DATA ANALYSIS, DATA VISUALIZATION

Apr 2021 – Jan 2021

Performed **exploratory data analysis** on 6 different datasets to gain useful insights into the data. Used **predictive ML models** like **SVM** and **XGBoost** to suggest solutions to problems presented e.g **Churn Prediction**, **Loan Defaulting**.

SKILLS

Interests: Machine Learning • Data Science • Deep Learning • Blockchain • Opensource

Languages: Python • SQL

Frameworks: Scikit-learn • Numpy • Pandas • Flask • Tensorflow • Hugging Face

Familiar: C++ • Web3 • React • OpenCV • HTML/CSS • NoSQL • Solidity

ACADEMIC ACHIEVEMENTS

- JEE rank - 21000 • MHCET rank - 1400 • Qualified and cleared various Science Olympiads.

POSITIONS OF RESPONSIBILITY

- Sponsorship executive and Public Relations head at Technovanza, VJTI
- Founding member and Joint General Secretary at Vishwa Astroclub, VJTI

INTERESTS

Astrophysics • Game theory • Artificial Intelligence • Reading • Cryptocurrencies • International Relations