

# Fake News Detector & News Recommender

An intelligent tool for fighting misinformation and discovering reliable news content

By Aditya Raj(E23CEU1149)



## **Project Overview**



#### Detect Fake News

Deep learning algorithms identify misleading content



#### Recommend Related News

NewsAPI integration for reliable alternatives



# User-Friendly Interface

Accessible through web application

## Tech Stack

#### **Core Libraries**

- TensorFlow & Keras
- Streamlit
- NewsAPI

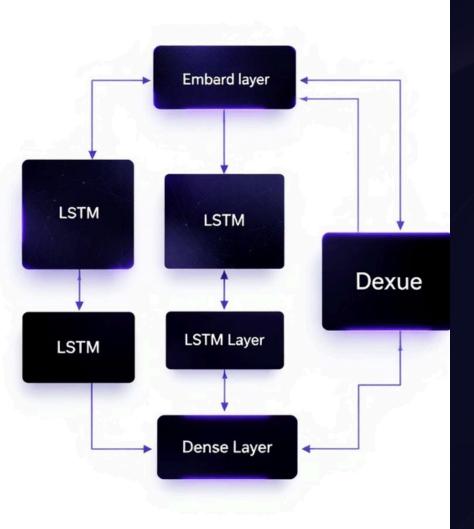
## **Supporting Tools**

- dotenv
- NLTK
- Pandas

## **Key Functions**

- Text preprocessing
- Model training
- API integration





## **Model Architecture**



### **Embedding Layer**

Converts words to vectors



#### LSTM Layer

Captures sequential patterns

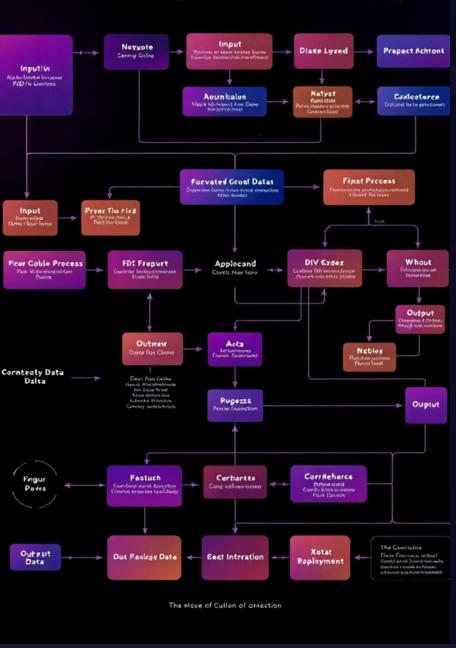


## Dense Layer

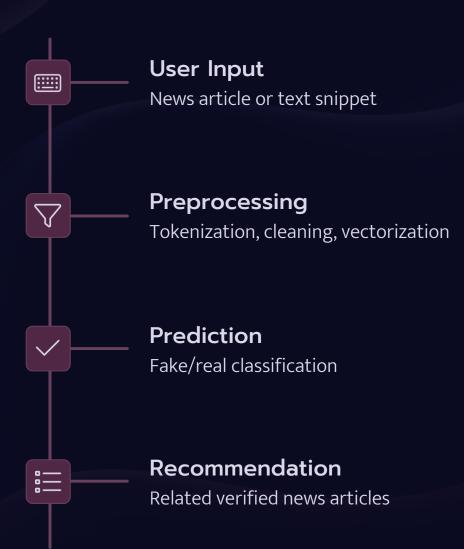
Sigmoid activation for binary output

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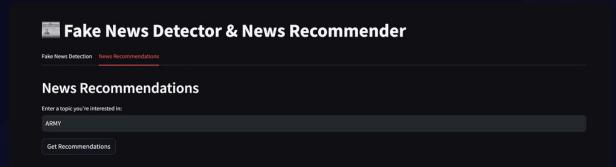


## Workflow



## App Demo



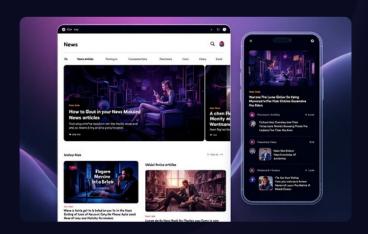




**Input Screen**Enter article text



**Analysis Tab**Credibility score



**Recommendations Tab**Alternative verified sources

# Future Improvements

**Enhanced Models** 

Integrate BERT or GPT for improved accuracy

**Expanded Sources** 

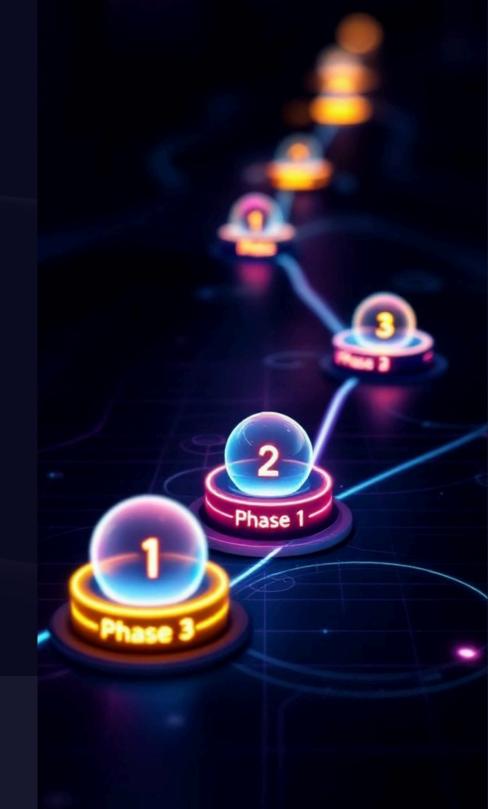
Additional news APIs for broader coverage

Explainable AI

Highlight suspicious text patterns

Mobile App

Dedicated application for on-the-go verification



## **Get Involved**

