

Gen AI Exchange Hackathon

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Problem Statement : AI-Powered Tool for Combating Misinformation

Brief about the prototype:

TruthLens is an AI-powered platform designed to detect and prevent the spread of misinformation across text, images, and videos. It combines real-time fact-checking, deepfake detection, multilingual analysis, and source credibility scoring into a single solution. Unlike existing tools, TruthLens not only flags misinformation but also explains it in simple language for students, rural communities, and non-technical users, making it globally accessible. By integrating Google Fact Check APIs, advanced NLP models, and AI-driven forgery detection, TruthLens empowers journalists, educators, and everyday users to verify information instantly, ensuring that truth is easier to access than falsehood.

Opportunity should be able to explain the following:

Most existing fact-checking tools focus only on text-based claim verification .TruthLens is different because it integrates text, image, and video verification into one unified platform, supports multilingual analysis, and presents results in simple, understandable language for all users, including rural and non-technical audiences.

TruthLens solves the misinformation problem by combining AI-driven fact-checking with real-time deepfake detection. Whenever a user inputs a link, post, image, or video, the system automatically cross-checks claims with trusted sources (Google Fact Check API) analyzes content for manipulations, and generates a credibility score.

Combines fact-checking + AI deepfake detection in one platform,Explains misinformation in simple terms (for students, rural users, non-tech people).Works in multiple languages, ensuring global scalability.

List of features offered by the solution

Real-time fact verification (with credibility score).

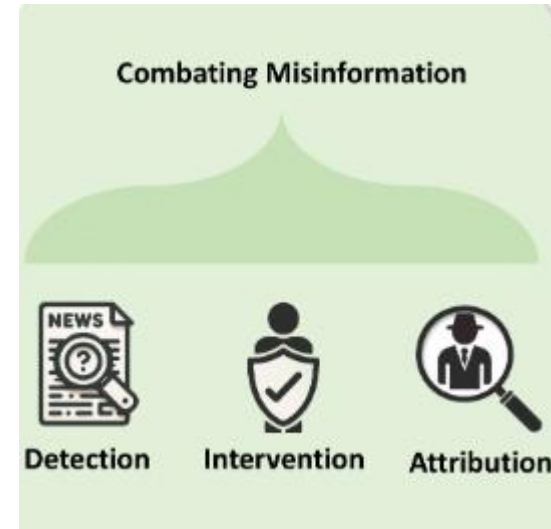
AI-powered deepfake & image forgery detection.

Multilingual misinformation detection.

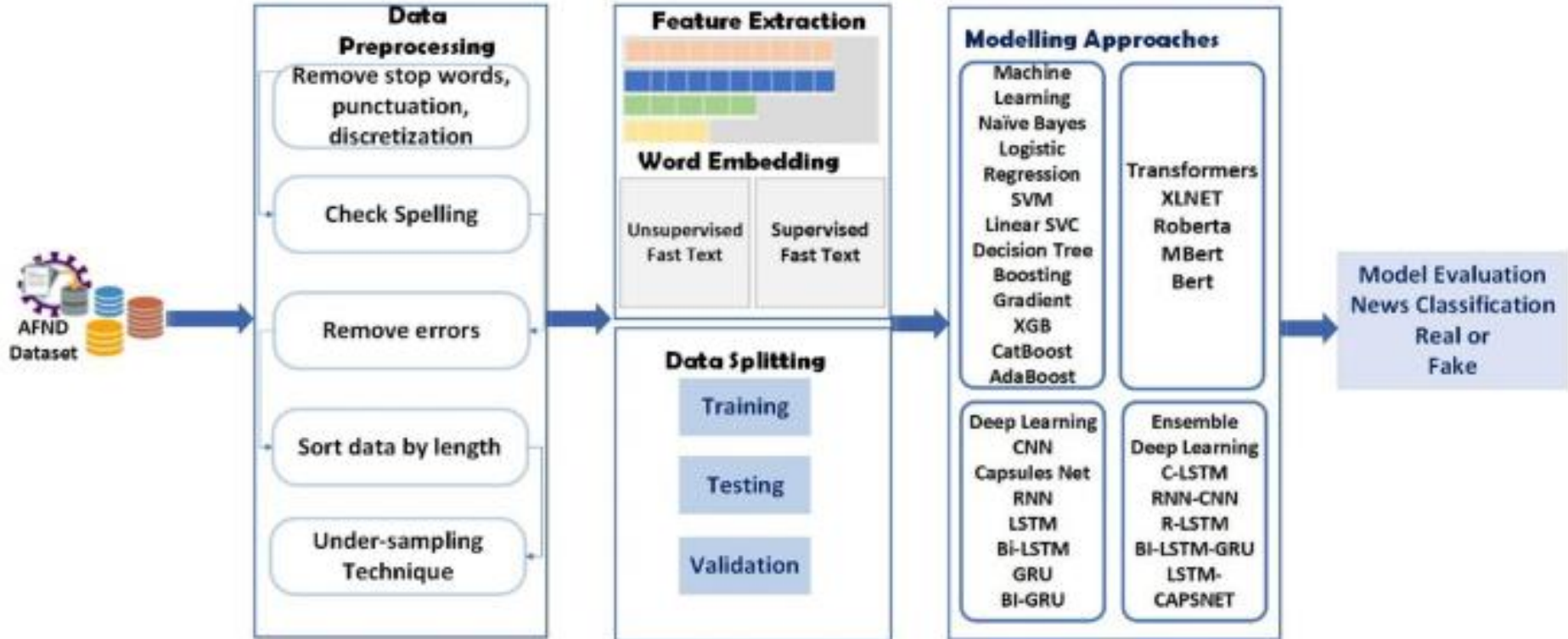
Source reliability ranking.

Simple-language explanation mode.

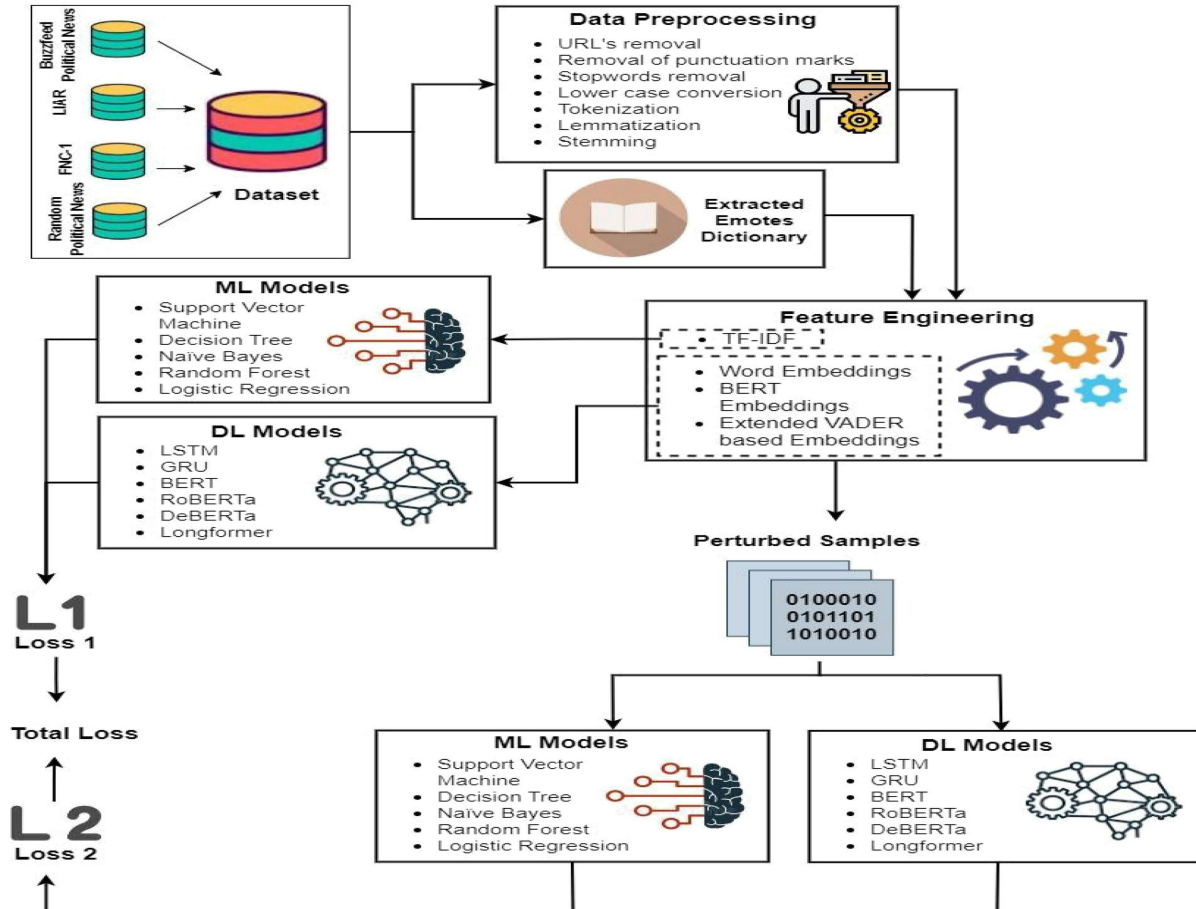
Web + Mobile app with interactive UI.



Process flow diagram or Use-case diagram



Architecture diagram :



Technologies to be used in the solution:

Frontend: React.js, Tailwind CSS

Backend: Python (FastAPI/Django)

AI/ML: Hugging Face, TensorFlow/PyTorch, Google Generative AI APIs

APIs: Google Fact Check API

Database: Firebase / MongoDB

Cloud: Google Cloud Platform

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Thank you