**AI-Powered Fake Certificate and Fake Job Posting Detector using NLP**

**Problem Statement:**

With the increasing use of online education platforms and digital job portals, fraudulent activities such as fake certificates and fake job postings are becoming more common. These scams mislead students, professionals, and organizations, resulting in financial loss, misuse of resources, and reputational damage. Traditional verification methods are often manual, time-consuming, and prone to error, creating an urgent need for intelligent, automated solutions that can efficiently detect and prevent fraud.

This project proposes an AI-powered system using Natural Language Processing (NLP) and OCR to detect and classify certificates or job postings as genuine or fake. For job postings, the system analyzes text patterns, unrealistic offers, and fraudulent company details using NLP models such as BERT. For certificates, OCR extracts text and verifies it against trusted databases, while CNNs analyze fonts, seals, and logos for signs of forgery. The system outputs a genuine/fake result along with a confidence score, providing an effective and automated solution for universities, companies, and government agencies to combat fraud.

For job postings, the system uses NLP models like BERT (Bidirectional Encoder Representations from Transformers) to analyze textual content for authenticity. It identifies suspicious patterns such as unrealistic salary offers, vague job descriptions, absence of official contact details, grammatical inconsistencies, and requests for upfront payments or personal information. Additionally, the model performs Named Entity Recognition (NER) to extract key entities like company names, job titles, salary ranges, and skill requirements, which are then cross-checked with verified sources such as LinkedIn or official corporate databases. Through these analyses, the system can detect whether the job listing follows genuine corporate patterns or exhibits fraudulent behavior.