AI-Based AI-Generated Content Detection System Using NLP

Abstract:
With the increasing use of AI to generate content, identifying AI-generated text has become essential for content verification and authenticity. This project focuses on developing an **AI-based AI-generated content detection system** using **NLP** to differentiate between human-written and AI-generated text.

Methodology:
The system will utilize **NLP techniques** such as **syntactic analysis**, **semantic comparison**, and **stylometric analysis** to detect patterns indicative of AI-generated content. Features like repetitive structures, coherence, and unnatural phrasing will be analyzed. **Deep learning models** like **BERT**, **GPT-3**, and **T5** will be used to compare the writing style and linguistic features of human-written versus AI-generated text. The system will be trained on large datasets of human-written and AI-generated text to recognize distinguishing patterns.

Outcome:
The outcome will be a reliable and automated system that can detect AI-generated content with high accuracy. This system will be valuable for content verification in news, academic publishing, social media, and marketing, helping maintain authenticity and trust in online content.