

Financial Report Summarization Using Deep Learning-Based NLP Models

Abstract:

Financial reports contain **complex and dense information**, requiring intelligent summarization for **investors, financial analysts, and decision-makers**. This project develops an **AI-based financial summarization system** using **deep learning and NLP** to **automate financial statement analysis**.

Methodology:

- **Data Preprocessing:** Handling **numerical data, financial terminology, and unstructured reports**.
- **Summarization Models:** Leveraging **FinBERT, Longformer, and Pointer-Generator Networks** for summarization.
- **Performance Metrics:** Evaluating against **human summaries, financial accuracy, and readability**.

Outcome:

The system provides **precise, informative, and accessible summaries**, enabling **faster decision-making** in **stock market analysis, business intelligence, and financial planning**.