

Project Abstract

Legal Contract Simplification with Large Language Models (LLMs)

Legal contracts are often lengthy and filled with intricate, domain-specific terminology that can be difficult for non-lawyers and even legal professionals to interpret quickly. This complexity often hinders efficient legal review, client understanding, and timely decision-making. To address this challenge, this project presents an intelligent Natural Language Processing (NLP) system that simplifies legal contracts using advanced Large Language Models (LLMs), without compromising on legal accuracy or compliance.

The system is designed around four key components: document segmentation, key clause identification, abstractive summarization, and legal validation. Initially, a contract document is segmented into its individual clauses using rule-based pattern recognition techniques. Once segmented, the system identifies legally significant clauses such as those related to termination, indemnity, confidentiality, payment terms, and jurisdiction through keyword-based filtering. These selected clauses are then passed to a transformer-based summarization model which generates simplified, plain-language summaries. The summaries retain the original clause's legal intent while enhancing clarity and reducing complexity.

Finally, a validation layer flags the simplified content for human legal review, ensuring the system supports rather than replaces expert judgment. This approach maintains compliance with legal standards while greatly improving accessibility and comprehension. The project demonstrates the potential of AI-powered tools to augment legal processes, reduce manual workload, and increase transparency in contract interpretation. It marks a step forward in the evolution of legal technology, bridging the gap between legal expertise and user-friendly understanding.

Vivekananthan S

Department of Computer Science and Engineering

Vishal Kumar R K

Department of Computer Science and Engineering

Vetrivel P

Department of Computer Science and Engineering

Vishaal S

Department of Computer Science and Engineering