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| **Sl NO** | **AUTHOR** | **PURPOSE** | **SAMPLE** | **RELEVANT**  **FINDINGS** |
| 1. | [Phaneendra Kumar Namala](https://www.linkedin.com/in/phaneendrakn/) | Understanding the Underlying Mechanics and Practical Uses of LangChain | RAG, Core concepts, architecture of langchain | LangChain components to build new prompt chains Core Modules of LangChain : LLM interface, prompt templates , agents , retrieval modules ,memory ,callbacks |
| 2. | [Stephen Amell](https://medium.com/@iamamellstephen?source=post_page-----a1c25e9fbe9c--------------------------------) | AI in Due Diligence: Revolutionizing the Assessment Process | NLP, XAI, Predictive Analytics | AI has revolutionized the due diligence landscape, offering unprecedented opportunities for efficiency, |
| 3. | Munivel Devan1 , Samir Vinayak Bayani2 , Naveen Pakalapati3 , Lavanya Shanmugam4 | AI-Driven Solutions for Cloud Compliance Challenges | machine learning algorithms, | Metric Improvement with AI (%) Risk detection rates 35% Precision in identifying vulnerabilities 90% Time to detect compliance issues 50% reduction |
| 4. | Enhancing Institutional Assessment and Reporting Through Conversational Technologies: Exploring the Potential of AI Powered Tools and Natural Language Processing | James Hutson1\* , Dan Plate2 | NLP | This study explores the potential of conversational technologies, AI-powered tools, and natural language processing (NLP) in enhancing institutional assessment and reporting processes in higher education. |
| 5. | Reflections on the Use of AI in the Legal Domain | Liane Colonna |  |  |
| 6. | Exploring\_explainable\_AI\_in\_the\_tax\_domain | Łukasz Górski1,2 · Błażej Kuźniacki3,4,5 · Marco Almada6 ·  Kamil Tyliński7,15 · Madalena Calvo8 · Pablo Matias Asnaghi9 ·  Luciano Almada9 · Hilario Iniguez10 · Fernando Rubianes11 · Octavio Pera11 ·  Juan Ignacio Nigrelli | XAI, LIME,  Bayesian rules | highlighting the importance of transparent AI in ensuring taxpayer rights and tax morale, ultimately facilitating the creation of user-centric, domain-specific XAI methods. |
| 7. | AI in Relation to Law: Transforming the Practice, Enhancing Efficiency, and Ensuring Ethical Compliance | Kaledio E, Oloyede J, Olaoye F | NLP,Langchain | AI technologies in the legal profession promises enhanced efficiency, accuracy, and innovation |
| 8. | A novel approach : Chat kanoon |  | Llms : GPT-4,  Llama2,  Next.js framework | aims to democratise legal information, making it more accessible and affordable, |
| 9. | LEGALBOT - AI LAW ADVISOR CHATBOT | Bhavika Pardhi, Shrutika Koli, Vivek Khanzode, Akshata S. Raut | NLP, OPENAI Embeddings | Help users draft legal documents, such as contracts, wills, or lease agreements, by guiding them through a series of questions and generating customized documents. |
| 9. | OpenJustice.ai: A Global Open-Source Legal Language Model | Samuel DAHANa*,*1, Rohan BHAMBHORIAb, David LIANG c and Xiaodan ZHUb | RAG, NLP | aims to generate a range of legal narratives and solutions |
| 10. | Commodification bets all the way from personal data to AI | Marco Giraudo\*, Eduard Fosch-Villaronga†, Gianclaudio Malgieri† | Deep learning  techniques | proactive intellectual inquiry, The pattern mirrors the first phase of information capitalism |
| 11. | Artificial intelligences effects On the legal sector transforming Legal practice. |  | Open ai | AI's ability to analyze vast datasets, contract analysis, |
| 12. | The Cambridge Law Corpus:  A Dataset for Legal AI Research | Andreas Ostling1 Holli Sargeant2 Huiyuan Xie2 Ludwig Bull3  Alexander Terenin2 Leif Jonsson4 Mans Magnusson1 Felix Steffek2 | Roberta, gpt-4,gpt-3.5 | use the corpus for research both in legal AI and legal  research, case outcome extraction and topic model analysis, and provide a first benchmark on case  outcome extraction. |

**Methodology in short:**

Firstly, develop a model using NLP and NLTK techniques to study and analyze legal documents, then build a chatbot using streamlit.

Building a chatbot with Streamlit and developing a model to analyze legal documents using NLP and NLTK approaches are two steps in the process. This is a thorough methodology:  
  
Step 1: Gathering Information  
Compile a legal document dataset. These could be laws, contracts, orders from courts, etc.  
  
Step 2: Preparing the data  
Tokenization: Text segmentation into words and sentences.  
Put an end to words Elimination: Getting rid of terms like "is," "and," and "the" that don't add anything to the sentence.  
Lessening words to their simplest form (e.g., "running" to "run") is known as lemmatization.

Step 3: Bag of Words for Feature Extraction (BoW): This method represents text data as a bag of words.  
Term Frequency-Inverse Document Frequency, or TF-IDF: A method of evaluating word importance.  
Using pre-trained embeddings such as Word2Vec is known as word embeddings.

Step Four: Creation of Models  
Text Classification: Classification tasks using deep learning models such as LSTM, or algorithms such as SVM and Naive Bayes.  
Named Entity Recognition (NER) is the process of recognizing dates, legal entities, and other pertinent data.

Step 5: Constructing the Chatbot Creating the Conversation Flow: Managing Conversations with Intent Recognition and Slot Filling.  
Using the trained NLP models to comprehend and reply to user inquiries is known as "integrating NLP models."  
Developing the User Interface: Streamlit is used to generate an interactive user interface using predefined open source LLMs like Hugging face and Google API embeddings.