Legal Analytics

Use of Natural Language Processing, Machine/Deep Learning in Legal domain.

# Introduction

Legal resources such as court cases, bare-acts, legislations and other legally relevant documents are increasingly and freely available on the internet. They are in unstructured format, ie. almost entirely presented in natural language. Legal professionals, researchers, and students need to manually extract and represent information structured format. To support such tasks, powerful text analytic tools can be developed effectively, reducing manual effort substantially.

# Possible Applications

* Information retrieval: Given a query, find “relevant” information, not just plain text search.
* Information extraction: Given a legal text document, extract facts (for example: people, places, events, or transactions) and store them in a database.
* Summarization: Given a lengthy legal text document, summarize it in few lines.
* Question answering: Interpret a question, and search a set of documents to find the right answer. Chatbot.

# Projects done so far

* **Lawyer Assistant**:
  + Smart e-discover of court cases, based on themes and not plain text search.
  + Finding similar cases
  + Case summarization
* **Catch phrase Extraction and Precedence Detection**:
  + Finding multiple catchphrases representing legal documents.
  + Finding previous citable court cases.

# Technologies used so far

* Programming: Python and associated libraries.
* Machine Learning: Scikit-learn
* Deep Learning: Tensorflow, Keras
* Natural Language Processing: Nltk, Spacy, Gensim. Stanford NLP, CRF++

# Details of the consultant

* **Name**: Yogesh H. Kulkarni
* **Bio-data**: <https://www.linkedin.com/in/yogeshkulkarni/>
* **Address**: E1-32 State Bank Nagar, NCL, Panchavati, Pashan, Pune-411008, India.
* **Email**: [yogeshkulkarni@yahoo.com](mailto:yogeshkulkarni@yahoo.com)
* **Phone**: +91 9890251406
* **Website**: <http://www.yati.io>