# **Extraction from 159 Legal Court Documents**

## 1. Process PDF documents using Python

Ipython Notebook	Description
1.Extraction by LexNLP.ipynb	Extract meta inforation use LexNLP package.
2.Layer Analysis on Sigle File. ipynb	Use pdfminer to extract the raw text and the paragraph segamentation in the PDF document.
3.Patent Position by Layer.ipynb	Identify the position of patent number in extracted layers from PDF.
4.Opinion and Author by Layer.ipynb	Extract opinion text, author, decisions from the layers list.
5.Wrap up to Meta Data.ipynb	Store extracted meta data to .json or .csv
6.Visualize citation frequency.ipynb	Bar plot of the citation frequencies

## 2. Data generated by Python

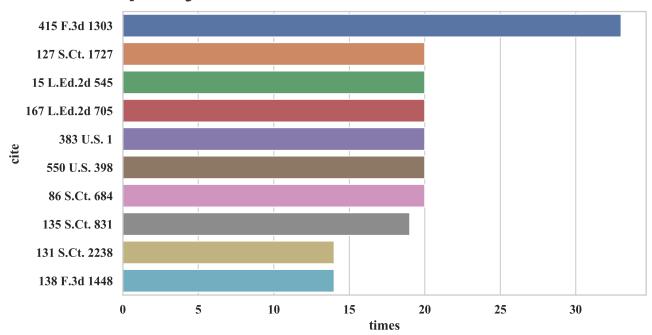
File	
pdf2text159.json	A dictionary of 3 list: file_name, raw_text, layers.
cite_edge159.csv	Edge list of citation network
cite_node159.csv	Meta information of each case: case_number, court, dates
reference_extract.csv	cited cases in a list for every case, untidy format for analysis
citation159	file citation pair, tidy format for calculation
regulation159	file regulation pair, tidy format for calculation

# 3. Analyze and Visualize using R

File	
Calculate Citation Frequency.Rmd	Analyze reference_extract.csv
Citation Network.Rmd	Analyze cite_edge159

### 4. Visulization Chart

#### **Citation Frequency**



#### **Citation Network**

