



# Legal Brief Key Items Extractor

A dynamic NLP-powered tool for automatically extracting and analyzing key legal arguments from court briefs with precise page references and importance scoring.



# The Challenge

## Manual Analysis

Attorneys spend hours manually reviewing lengthy legal briefs to identify critical arguments.

## Time Pressure

Case preparation requires efficient extraction of key points with precise page references.

## Importance Ranking

Need to score and prioritize arguments by legal significance and relevance.



# Dynamic NLP Solution

## Automated Extraction

Uses natural language processing to identify the top 10 most significant legal arguments from amicus briefs and court documents.

- No hardcoded required
  - Multi-factor scoring system
  - Automatic categorization

# Intelligent Scoring

Evaluates sentences based on multiple legal importance indicators with weighted factors.

- Legal citations analysis
  - Modal verb strength
  - Procedural importance

# Core Features



## Dynamic Extraction

Automatically identifies key arguments using NLP without hardcoding. Evaluates legal citations, modal verbs, and case-specific terms.



## Importance Scoring

Multi-factor scoring system ranks arguments by legal significance. Provides score transparency and breakdown.



## Page References

Tracks precise page locations for quick access. Includes statistical summaries and category distribution.



## Multiple Formats

Exports to Excel workbooks, CSV files, and JSON. Generates multi-sheet analysis with summary statistics.

# Technology Stack

## Python 3.12+

Core programming language with modern features and performance optimizations.

## PyPDF2

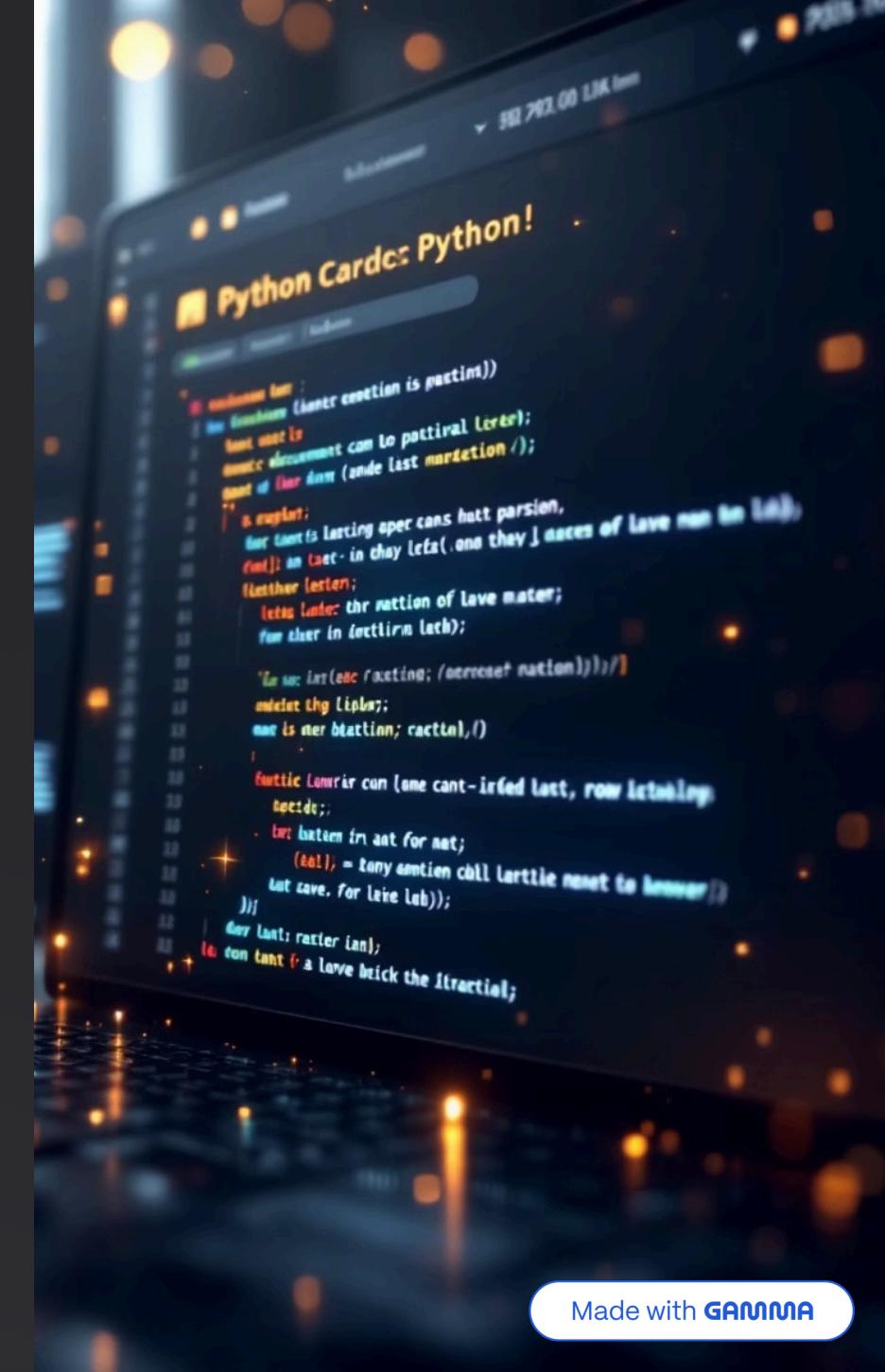
PDF text extraction and page-level processing for legal documents.

## NLTK

Natural language processing and sentence tokenization for text analysis.

## Pandas & OpenPyXL

Data organization, analysis, and Excel file generation capabilities.



# Scoring Algorithm

Factor	Weight	Description
Legal Citations	2.0	Statutes, regulations, case law references
Modal Strength	2.0	Strong legal verbs (violate, prohibit, require)
Argument Indicators	1.5	Key legal actors (FDA, states, Congress)
Subject Relevance	1.0	Case-specific terminology and context
Procedural Terms	0.5	Process words (injunction, motion, relief)

**Thresholds:** Minimum 3.0 total score, Critical 8.0+, High priority 5.0-7.9



# Simple 3-Step Process

## Prepare PDF

Place your legal brief PDF in the notebook directory or provide the full file path.

## Run Analysis

Execute cells 1-10 sequentially to load, extract, score, and categorize key arguments.

## Review Results

Access ranked arguments, Excel workbook, and CSV files with complete analysis breakdown.

# Real-World Application

## ☐ Case Study: Alliance for Hippocratic Medicine v. FDA

Successfully analyzed amicus brief involving FDA approval of mifepristone, state authority post-Dobbs, and federal preemption issues. Dynamic extraction identified critical arguments regarding regulatory violations and enforcement burdens.



### FDA Regulatory Analysis

Identified violations of federal statutes and regulatory procedures with precise citations.



### Constitutional Authority

Extracted key arguments about state powers and federal preemption post-Dobbs decision.



### Public Interest Factors

Highlighted arguments regarding public safety, enforcement resources, and policy implications.



# Output & Export Options

## Excel Workbook

- Key Items sheet with full analysis
- Summary statistics and metrics
- Category distribution breakdown

Each extracted item includes rank, category, importance level, page number, total score, and full argument text with detailed score breakdowns.

## Data Formats

- CSV files for quick reference
- JSON export capability
- Pandas DataFrames for analysis



## Transform Your Legal Analysis

# Save Hours of Manual Review

### Efficiency

Automate extraction and ranking of critical legal arguments from lengthy briefs.

### Accuracy

Multi-factor scoring ensures important arguments are properly identified and ranked.

### Accessibility

Jupyter notebook format with clear documentation makes implementation straightforward.

Note: This tool assists legal professionals but does not replace human legal analysis and judgment. Always verify extracted arguments against source documents.