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CS 410 Zhai

You have the right to an attorney. If you cannot afford an attorney, one will be provided for you.

There's a statistic out of the state of Louisiana; in their worst case public defenders in the state have just 7 minutes to analyze, evaluate, and build a case for their clients. Meanwhile, 95% of publicly defended cases end with a plea bargain – we are providing free guilty verdicts, not legal services.

Law --less is a open source text summarization utility designed to analyze legal documents and provide effective, concise overviews to those already over-burdened by caseloads. Law --less allows for generic and query-relevant summaries using TF-IDF supplemented with graph-based ranking models for sentence extraction.

The combination of query and graph based ranking makes law --less's technology unique but also allows us to leverage the basic principles of Information Retrieval in conjunction with well understood research in the field. Further more law -less provides accessibility current technologies have yet to offer, rather than a need to understand initially intimidating command line toolkits such as MeTA law --less provides a simple web interface and a targeted tool for those not in the computer science world.

The technology will be developed mostly in python, leveraging scientific computing libraries such as numpy and scipy and text and natural language libraries such as textblob and nltk. Finally the project will be evaluated using a 2010 data dump by the Australian government of over 4,000 legal case files.

Testing could be performed using crowd sourced results. We propose to take a number of sample documents, summarize them and then give a timed reading comprehension test via Mechanical Turk.

Timeline:

Initial Research (2 weeks)

Prototype completion (3 weeks)

Parameter Tuning (1 week)

Testing on Legal Data sets (1 week)

Refinement based on evaluation (1-2 weeks)

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