

## Motivation

*The law is reason free from passion* — but you'll have to dig through hundreds of pages to find it.

- **Real World Problem Statement:** Legal research is a very time-consuming manual process; lawyers have to read lengthy court judgements to identify small portions of the judgment that are relevant.
- **Our Goal:** Apply sentence labelling to court judgments to partially automate the process of legal research. The benefits of this would be to improve the efficiency of legal research and enable the bulk analysis of court judgments.
- **Challenges:** Even professional lawyers with years of training can disagree on which labels to assign each sentence, as there can be elements of multiple tags with one sentence. In addition, the highly complex document structure of court judgements can be seen as multiple sub-documents within the one court decision.

# Data – High Court Judgments



R FOR IMMIGRATION (The Court) 855
not necessary to decide whether to accept the endants' submission that the Minister can stop sideration of whether to permit a detainee to the a valid application for a visa at any time and any reason or no reason. The first relevant
stion in this case is not whether the Minister can compelled to exercise power under s 46A. The relevant, and in this case the determinative, stion is whether, the Minister having decided to sider the exercise of that power but not having ided <i>how</i> the power will be exercised, s 195A(2) he Act gives the Minister power to grant a visa
ch forbids the very thing which was the subject uncompleted (consideration (making) a valid lication for a protection visa). As foreshadowed at outset of these reasons, this question should be wered "No".
ined for the purpose of considering the exercise ower under s 46A, thereby prolonging detention, er powers given by the Act are to be construed as permitting the making of a decision which would close the exercise of the power under s 46A ore a decision is made, thus depriving the ongation of detention of its purpose.
nstruing the Act
The proposition just stated is a conclusion ut the proper construction of the Act. As was <sup>31</sup> by four members of this Court in <i>Project Blue</i> <i>Inc v Australian Broadcasting Authority</i> , "[t]he ming of [a] provision must be determined 'by rence to the language of the instrument viewed as hole' <sup>32</sup> ". And an Act must be read as a whole "on prima facie basis that its provisions are intended give effect to harmonious goals". <sup>33</sup> Construction ald favour coherence in the law.
erpin what is sometimes called the "Anthony dern principle" <sup>34</sup> and the proposition on which

# Information Extraction from Legal Documents: A Study in the Context of Common Law Court Judgements

M. Mistica, G.Z. Zhang, H. Chia, K. Manandhar Shrestha, R.K. Gupta, S. Khandelwal, J.M. Paterson, T. Baldwin, D. Beck

{misticam,geordie.zhang,chiah,d.beck}@unimelb.edu.au

Faculty of Engineering and Information Technology Melbourne Data Analytics Platform & Melbourne Law School

## Data – Label Set

LABEL	DESCRIPTION
Fact	Specific facts of that case, e.g. <i>The applicant</i> rised maritime arrival on 5 September 2011.
Reasoning	Legal principles considered, e.g. The question failed to consider that the applicant faced a re-
CONCLUSION	Outcome of the case, e.g. <i>The Tribunal commpeal should be allowed</i> .

## Experiments

### **Initial Performance**

Model	Macro Micro								
	Ρ	R	F1	F1	Model	Class	Ρ	R	F1
RoBERTa	.64	.67	.65	.71		CONCLUSION	.42	.71	.53
BERT	.64	.70	.65	.70	XLNet	Fact	.72	.62	.67
XLNet	.65	.70	.66	.72		Reasoning	.81	.77	.79
MajorityClass	.20	.33	.25	.59					
NBSVM	.55	.56	.55	.63					

# **Sentential Context**

Model	Class	Ρ	R	F1
	CONCLUSION	.58	.80	.67
XLNet <sub>under-sampling</sub>	Fact	.85	.83	.84
REASONI		.82	.74	.78
	CONCLUSION	.71	.57	.63
XLNet <sub>non-sampling</sub>	Fact	.85	.85	.85
	Reasoning	.83	.87	.85

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that arises is whether the Tribunal eal probability of irreparable harm. nitted a jurisdictional error, the ap-