

A Trustworthy Lease Interpretation Tool for Vulnerable Renters

Bin Liang¹, Sara Shiowzhan², Zhidong Li¹

bin.liang@uts.edu.au, s.shiowzhan@unsw.edu.au, bin.liang@uts.edu.au

¹University of Technology Sydney, ²University of New South Wales



Trustworthy
Digital Society



BACKGROUND & MOTIVATIONS

Soaring rents, low vacancy rates, limited stock

Rising rents

Lease agreements are legally complex and resource-heavy to interpret.

Complex leases

Legal experts face high workloads

Expert Overload

Who is affected?
International students, older adults, Culturally and linguistically diverse (CALD) communities

Australia's housing crisis

Project Aims

Lease Texts

Clause segmentation

AI Interpretation

- AI-powered lease interpretation tool
- Plain-language summaries
- Flags risky/uncommon clauses

Mapping the Research Landscape

- LLM for legal domain (clause segmentation, plain-language translation)
- Digital Inclusion (human-centred design, accessibility for diverse communities)
- Trustworthy AI (Fairness, Accountability, Transparency, Explainability)



Planned Methodology

Literature Review

Review legal-domain LLM methods and explainability approaches.

Dataset

Data & Annotation

Build an annotated tenancy-lease dataset for model training.

Model Development

Fine-tune tenancy-specific LLMs

Evaluation

Evaluate model accuracy for legal fidelity and accessibility.

Develop

AI tool that turns complex lease documents into clear, accessible summaries.

Empower

Helps vulnerable renters—students, older adults, and CALD groups—understand their rights.

Enhance

Promotes inclusion through multilingual, voice-enabled, and accessible design.

Identify

Flags risky or unfair clauses before users sign their leases.

Expected Outcomes