



FORMAL METHODS AND AI FOR LAWS

PEDRO ERNESTO DE OLIVEIRA PRIMO



PROBLEMS TO ADDRESS

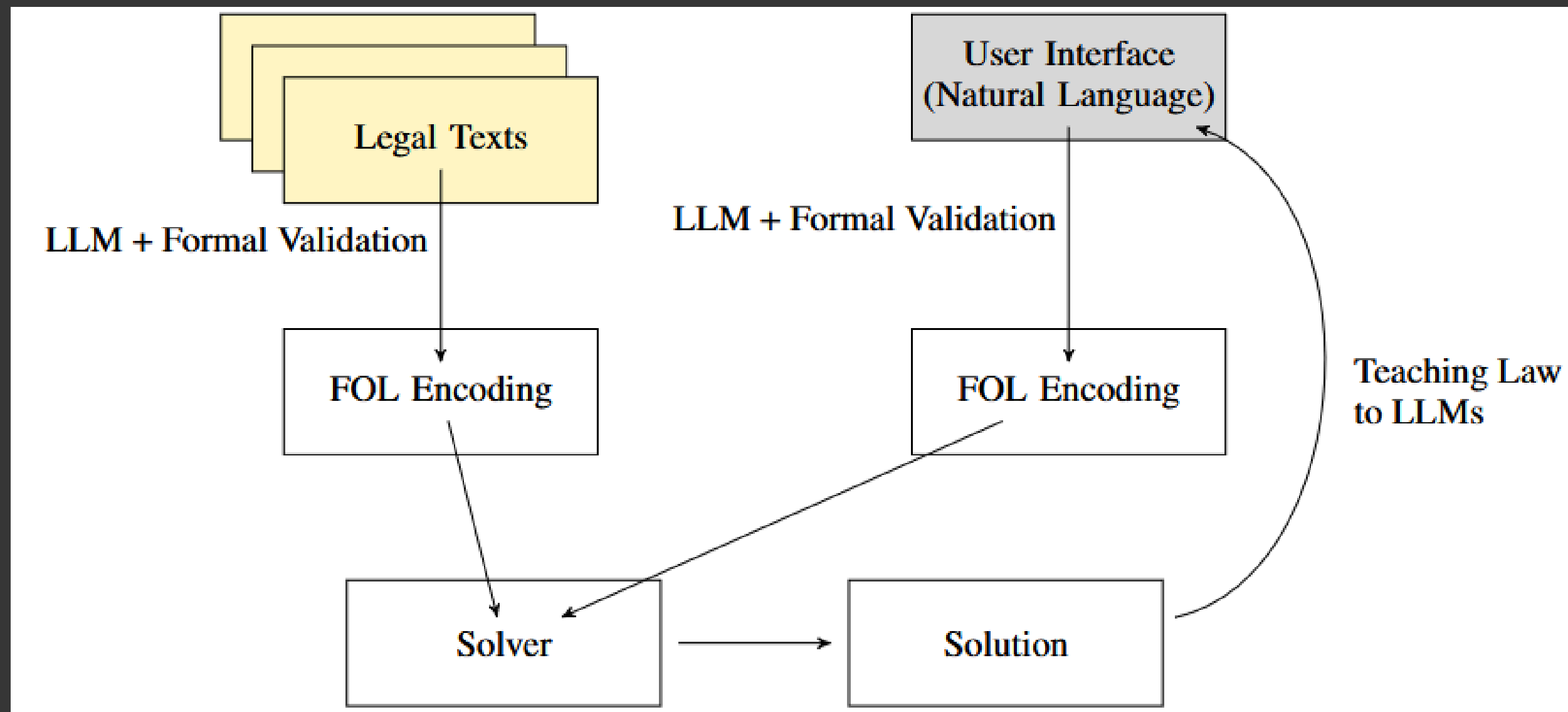
- Search for legal information
can be costly
- Lay people may have difficulty
in understanding of legal texts
- LLMs are not reliable



PROPOSED SOLUTIONS

- Lawbots
 - AI assistance for experts
 - Democratization of legal information
- Translation of legal texts using formal methods

PROPOSED LAWBOT MODEL





POSSIBLE PROBLEMS

- Justice may sometimes be affected by social, economics or even racial aspects
- Experts must use it as a tool, not as an irrefutable truth
- Use of ressources to train LLMs with enourmous amount of information



OTHER USAGES

- Formal models use can be extended to other areas such as medicine literature



ADEME SCENARIO

- Green Technologies
 - Lawbots can be used to help implementation of new environmental legislation projects