

XHAILE: Explainable Hybrid-AI for computational Law & accurate Legal chatbots

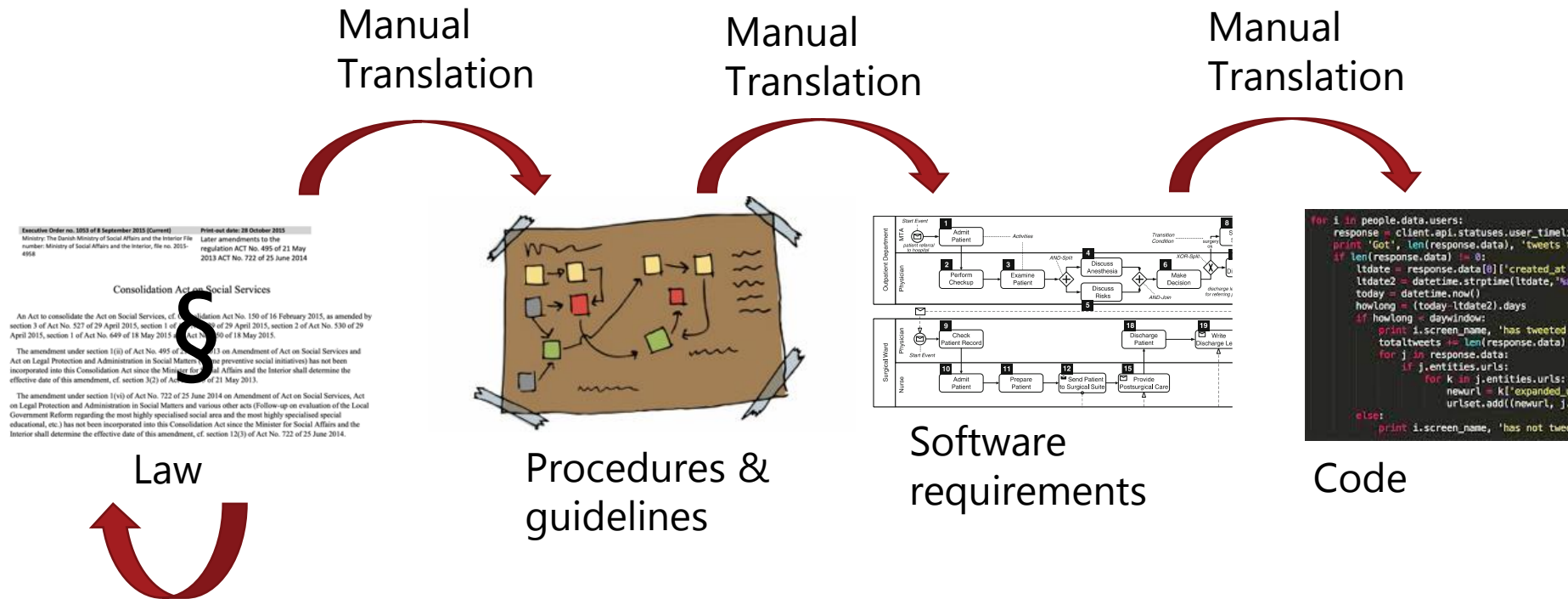
December 9th, 2025

Henrik Palmer Olsen, Professor Faculty of
Law and Thomas Hildebrandt, Professor
Department of Computer Science

KØBENHAVNS UNIVERSITET



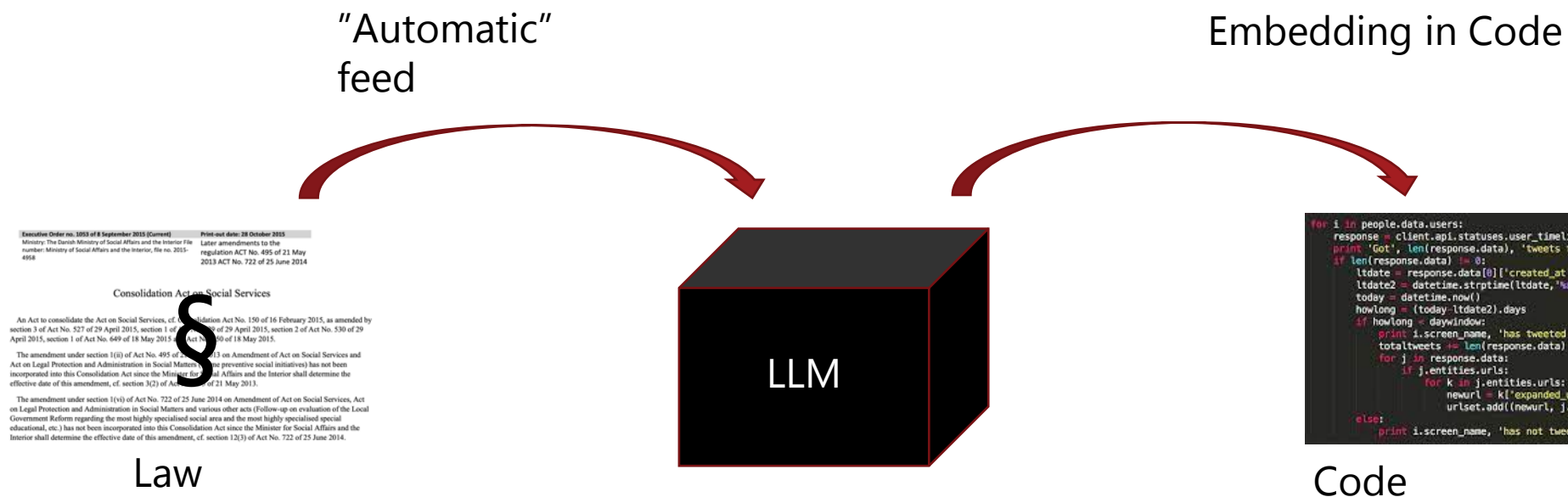
Computational Law in Practice: the traditional way



- Many examples of failed systems due to a failure to fully capture legal requirements
- Frequent changes to the law require frequent and expensive updates to IT systems
- Manual translations sometimes lead to bugs in the system



Is Retrieval Augmented Generation the solution?



Hallucination-Free? Assessing the Reliability of Leading AI Legal Research Tools

Varun Magesh*
Stanford University

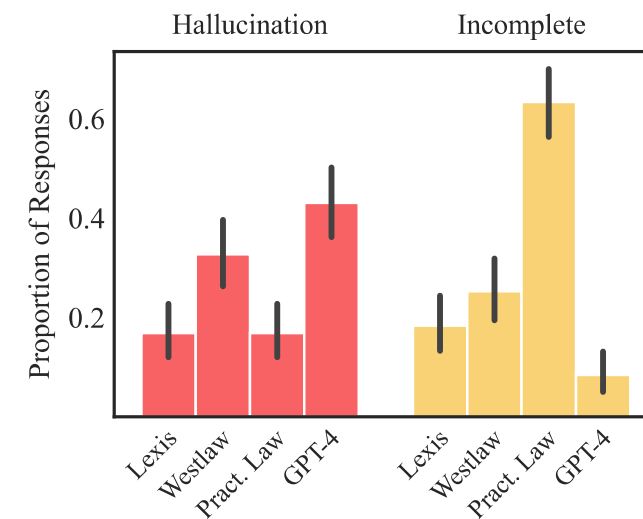
Faiz Surani*
Stanford University

Matthew Dahl
Yale University

Mirac Suzgun
Stanford University

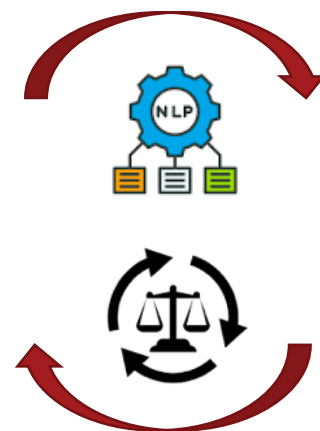
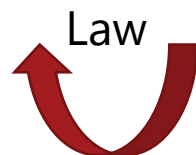
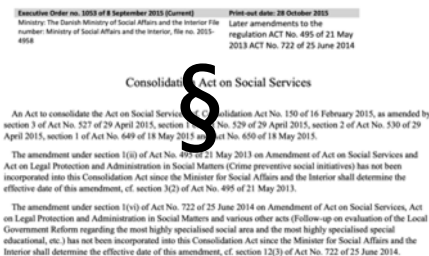
Christopher D. Manning
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XHAILE Vision: Symbolic AI + NLP & Language Models

Efficient
NLP-supported
translation of
Law texts to
Computational Law



Feedback to legal process
(Patterns, Simplification and
Digital-readiness)



DCR Graphs as
Human
Understandable
Accurate
Computational Law



LegalTech EcoSystem:

Open APIs for seamless
digitalisation of law and interaction
with services
in LegalTech solutions

Legal Practice:
Legality &
Benchmarks

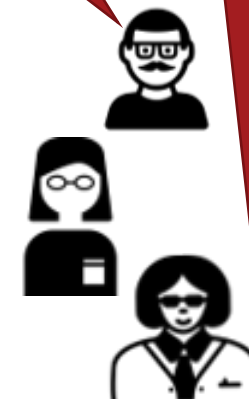


CitizenTech: Trustworthy
Conversational Agent (ChatBot)

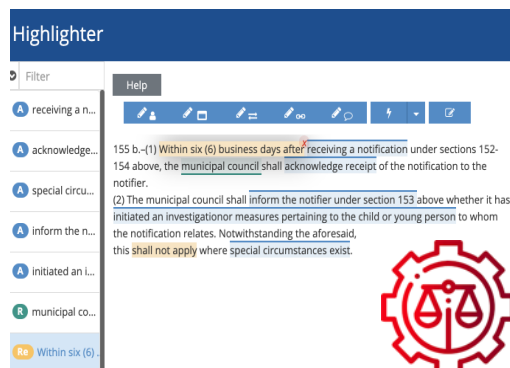
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My child
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illness

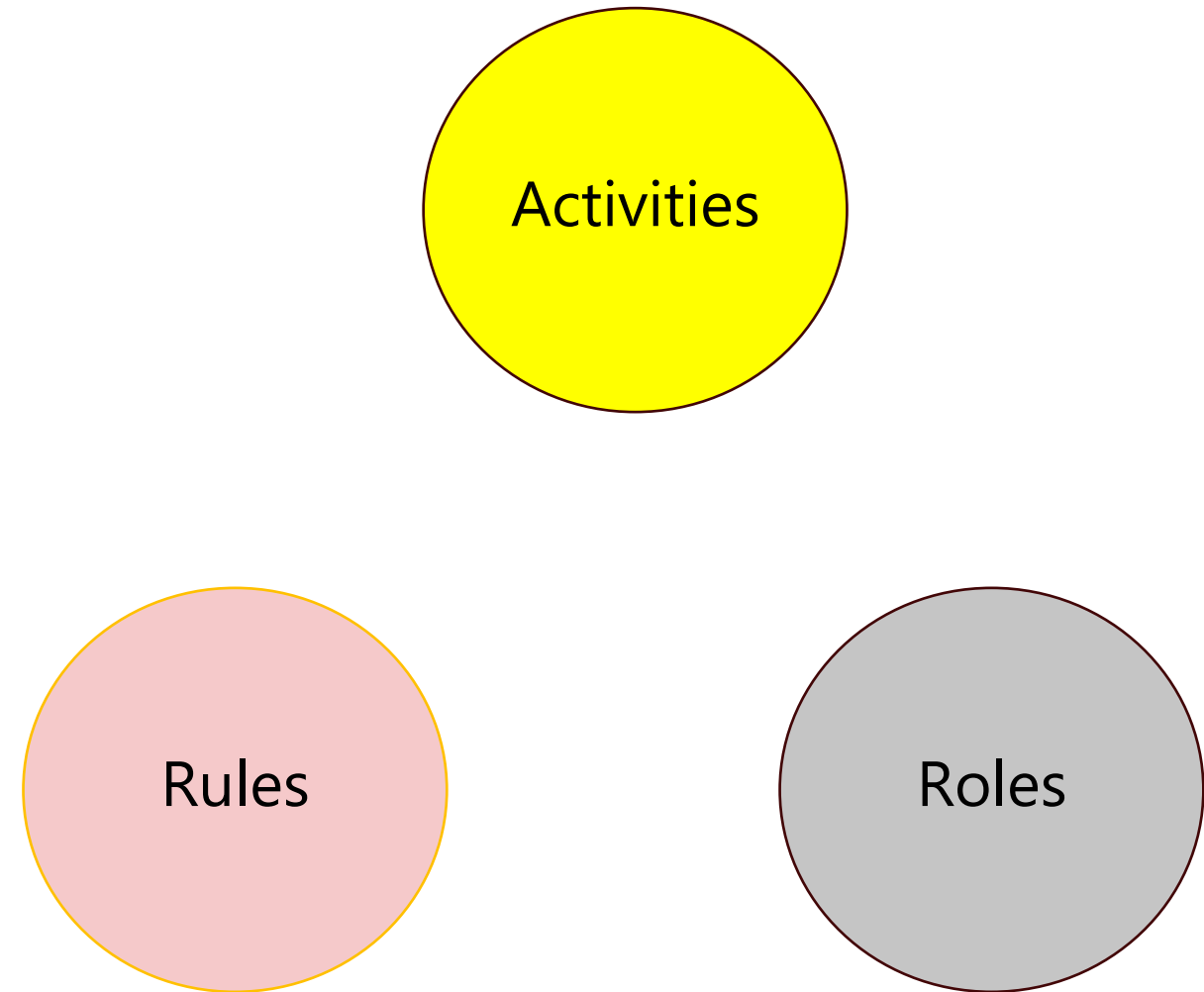


Structured (Marked-up) law



Example: Duty of Notification

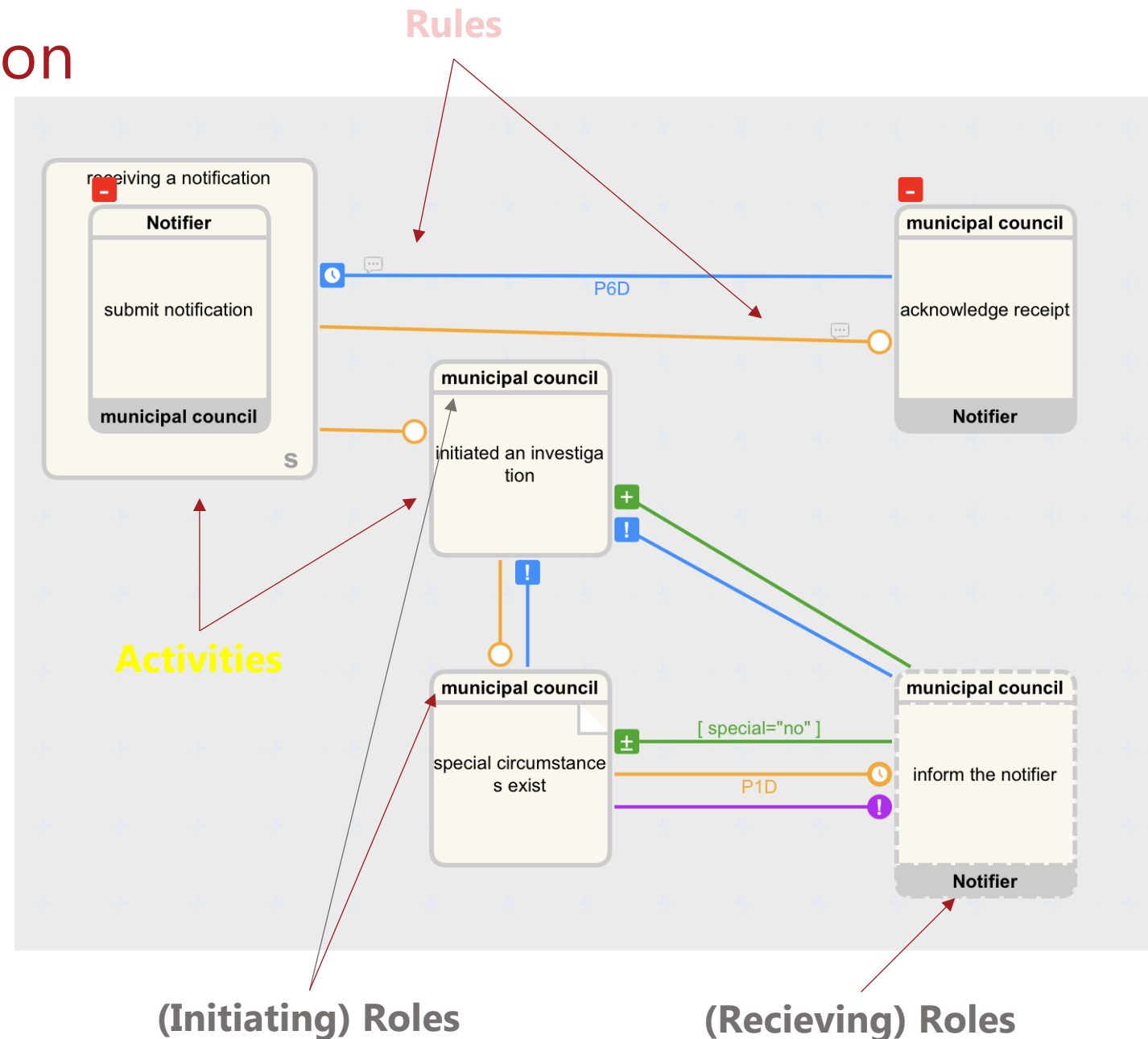
155 b.-(1) Within six (6) business days after receiving a notification under sections 152-154 above, the municipal council shall acknowledge receipt of the notification to the notifier.(2) The municipal council shall inform the notifier under section 153 above whether it has initiated an investigation or measures pertaining to the child or young person to whom the notification relates. Notwithstanding the aforesaid, this shall not apply where special circumstances exist.



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The general approach: Conversational Hybrid-AI (CHAI)

