

THE RESEARCH UNIVERSITY PRESS

International
Computational Law Journal

VOLUME 2 / ISSUE 3 / CURATED SOURCE EDITION

Catala: A domain-specific programming language for implementing legislative text

Dazza Greenwood · Megan Ma · Denis Merigoux · Liane Huttner

MIT Computational Law Report · Originally published 2021-09-24

Independent reader edition under CC BY 4.0. This attribution cover was added; original source PDF pages follow unchanged. Original authorship and source identity are retained. MIT, Stanford University, Stanford Law School and CodeX have not sponsored or endorsed this republication.

Source, license and version evidence accompany the online article.

MIT Computational Law Report • Media

Catala: A domain-specific programming language for implementing legislative text

Dazza Greenwood[1], Megan Ma, Denis Merigoux, Liane Huttner

[1]MIT

Published on: Sep 21, 2021

License: Creative Commons Attribution 4.0 International License (CC-BY 4.0)

IdeaFlow Episode 8: Domain-Specific Programming Language for Legislation

Visit the web version of this article to view interactive content.

law.MIT.edu IdeaFlow Episode 8: Domain Specific Language for Law

Turning law into code for legal expert systems is difficult. This is why Catala proposes a systematic process to involve both lawyers and programmers in the process. Catala is a domain-specific programming language designed for deriving correct-by-construction implementations of legislative texts. In this episode of IdeaFlow, we will be introducing Catala and the ways in which the language can be applied.

We will be joined by Denis Merigoux and Liane Huttner to discuss their research in the development of a programming language for law and to also explore the problems and prospects of their language. How can such domain-specific programming language help to bring Computational Law to life and what types of legal use cases can it help to solve? We'll explore these and other questions on this episode of IdeaFlow.

Participants will have an opportunity to ask questions and actively contribute to ideas for the research ahead.

Date: Friday, September 24th, 2021 at 12:00 - 1:00 PM ET

Host: Dazza Greenwood, Executive Director, law.MIT.edu

Guest: Denis Merigoux, PhD student at Inria ; Liane Huttner, PhD candidate at Université Paris I Panthéon-Sorbonne

Discussant: Megan Ma, PhD candidate at Sciences Po; Managing Editor (MIT Computational Law Report); and CodeX Fellow (Stanford).

Register: https://forms.gle/7uXsnsa5s9ZZAT2s8

- **Interested in diving deeper? Read their technical paper.**
- **Interested in IdeaFlow? Enjoy more episodes here.**

About Denis Merigoux:

Denis Merigoux is a PhD student at Inria inside the Prosecco team, under the supervision of Karthikeyan Bhargavan and Jonathan Protzenko, specialized in the study of programming languages and formal verification. After applied his novel philosophy of proof-oriented domain-specific programming languages to the domain of cryptographic implementations, Denis turned to the difficult problem of turning law into code. The focus of Denis' research is towards real-world applications, and he has been collaborating with the French tax administration to modernize their income tax computation infrastructure. Denis will start in January 2022 a Starting Research Position at Inria to continue his work at the intersection of law and computer science, around the new domain-specific language Catala.

About Liane Huttner:

Liane Huttner is a PhD candidate at Paris 1 Panthéon-Sorbonne, under the supervision of Professor Judith Rochfeld. Her research focuses on data protection and algorithmic law. Her thesis will provide a conceptual frame for the interpretation and application of Article 22 of the GDPR. In addition, she works on an interdisciplinary project which aims to create a computer language adapted to the law.

Her work has appeared in the Repertoire Dalloz and the Sorbonne Law Review. In 2019, she was a visiting fellow at the Institute of European and Comparative Law of the University of Oxford and at the Maison française d'Oxford. She is currently based at the Max Planck Institute for Comparative and International Private Law in Hamburg, where she is part of the Institute Scholarship Program.