

LLM Programme

AI in Legal Practice and Its Regulation

Curricular unit

AI for Lawyers and Prosecutors

Responsible Academic staff and respective workload in the curricular unit

Alexandre Zavaglia Coelho

Syllabus

Class 1: Digital transformation and legal practice

First part: Digital Transformation

- Legal tech and the Digital Transformation of Law: reflections in the Public and Private Sector
- The Digital Transformation: difference between the Impacts on Substantive/Procedural Law and on the Legal Practice
- The New Generations of LegalTech Products and Services: a better Legal System
- Digital Transformation in the Legal Market: new players and regulatory models

Second part: Applied technologies

- Legal Innovation: Automation and Artificial Intelligence trends in Law
- Automation and Data Science concepts
- Hyperautomation: new market and the integration between Automation and Artificial Intelligence
- Types of Artificial Intelligence
- Structured and Unstructured Data
- Small Data, Big Data, and External Data
- Volumetrics, Jurimetrics, and Risk Management
- Artificial Intelligence Techniques for Legal Tools (Natural language processing, Computational Law, Computer Vision, among others)
- Generative AI

Case studies:

- Examples of tech solutions for Litigation, Document Automation, Data Protection and Compliance;
- PDPJ - Digital Platform of the Judiciary of Brazil: new possibilities for data science and microservices in the Public Sector
- Generative AI Application Cases

Class 2: AI Governance and Ethics in practice

First part: AI Ethics

- Understanding the general and organizational principles of AI Ethics
- Identifying ethical dilemmas in AI applications
- What are biases in the context of artificial intelligence? Can they be positive or negative?
- Mitigating Negative (illegal or abusive) Biases in AI
- Fairness metrics and bias detection algorithms to continuously evaluate the AI models throughout their lifecycle

- AI Ethics Committees

Case studies: AI Ethics and discrimination bias

Second part: AI Governance

- Role of international standards and regulations, focusing on the AI Act
- Responsible AI agenda
- Structuring the AI Governance and Ethics Program
- Types of frameworks and models for AI governance
- Ensuring AI systems comply with existing frameworks and legal obligations
- Transparency, explainability, auditability and accountability

Case studies: Tools and techniques for monitoring and enforcing AI Governance and legal compliance

Class 3: **Lecture**

Mokander, J., Schuett, J., Kirk, H.R., and Floridi, L. 2023. Auditing Large Language Models: a three-layered approach.

Teaching methodologies

By means of text readings, seminars, and group discussions, as well as case studies and tutorials; evaluation through presentations and engagement in activities throughout the module.

Main Bibliography

AZOULAY, Audrey. 2022. Access: <https://www.un.org/en/chronicle/article/towards-ethics-artificial-intelligence>.

Blackman, Reid Reid. Ethical Machines: Your Concise Guide to Totally Unbiased, Transparent, and Respectful AI. Cambridge: Harvard Business, 2022.

Coeckelberg, M. 2020. AI Ethics. The MIT Press, Massachusetts.

Floridi, L. 2023. AI as agency without intelligence: On ChatGPT, large language models, and other generative models. *Philosophy & Technology* (2023) 36:15. pp. 2-7. Available at SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4358789

Novelli, C., Casolari, F., Hacker, P., Spedicato, G., and Floridi, L. 2024. Generative AI in EU Law: Liability, Privacy, Intellectual Property, and Cybersecurity. <https://arxiv.org/abs/2401.07348>

Mokander, J., Schuett, J., Kirk, H.R., and Floridi, L. 2023. Auditing Large Language Models: a three-layered approach. <https://arxiv.org/abs/2302.08500>

Russel, S., Perset, K., and Grodelnik, M. 2023. Updates to the OECD's definition of an AI system explained. <https://oecd.ai/en/wonk/ai-system-definition-update>

Noah; HUDEX, Alexander. AI for Lawyers: How Artificial Intelligence Is Adding Value, Amplifying Expertise, and Transforming Careers. Wiley, 2021.

Holloway, Eric. 2022. Access: <https://mindmatters.ai/2022/04/why-gpt-3-cant-understand-anything/>.

Waler, Joshua. ON LEGAL AI. English Edition. Fastcase, 2019.

Zavaglia Coelho, A. Klafke, G. F. Maito, D. C. Latini, L. M. D, Maruca, G, Chow, B. G, Feferbaum, M. 2023. Artificial Intelligence Governance in Organizations: Framework for AI Ethics Committees – Version 1.0. CEPI FGV Direito SP, São Paulo. <https://repositorio.fgv.br/server/api/core/bitstreams/b4e50e31-88e8-48d3-be01-58ce2315c8fe/content>