

International governance of artificial intelligence

Raphaël Déchaux

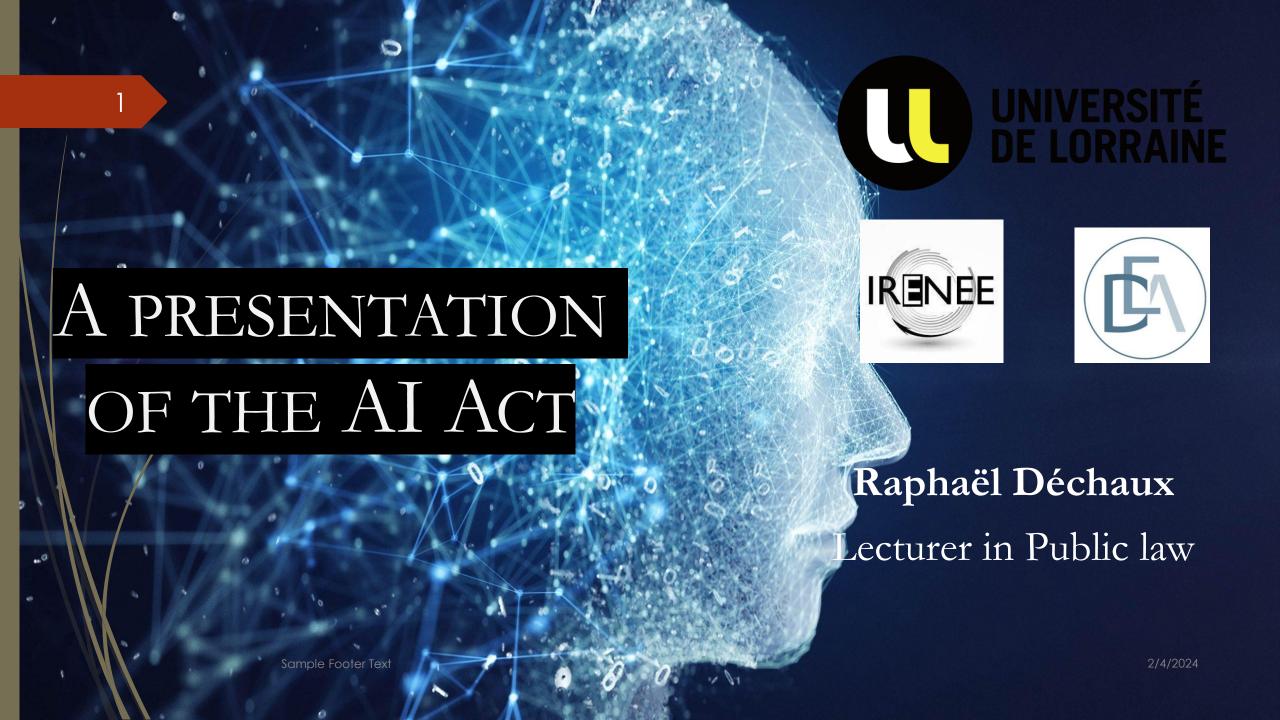
▶ To cite this version:

Raphaël Déchaux. International governance of artificial intelligence. 3rd cycle. Artificial intelligence and intellectual property, France. 2024. hal-04437283

HAL Id: hal-04437283 https://amu.hal.science/hal-04437283

Submitted on 5 Feb 2024

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



INTRODUCTION: THE NEED FOR A EUROPEAN LEGAL REGULATION

More than 600 "ethical" texts

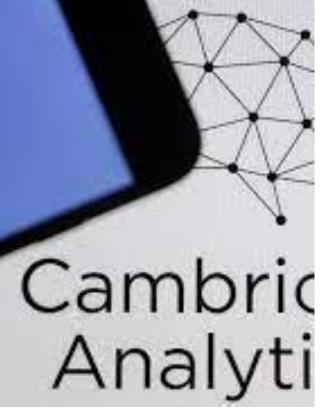
https://lestempselectriques.net/index.php/2020/05/06/ia-algorithmes-big-data-data-science-inventaire-des-cadres-ethiques-et-politiques/





Regulation of AI with ethical texts

- 2018 : Google => 7 principles.
- 2019 : Facebook => research centre dedicated to the ethics of artificial intelligence
- 2020 : BMW => Code of Ethics for AI













A few AI scandals of the past few years

The need for a European legal regulation

Why should international regulation be "better" or "more effective" than national regulation?

The need for a European legal regulation

Why should international regulation be "better" or "more effective" than national regulation?

- globalization of the digital economy
- context of international competition

Soft law in European regulation

- 51 for the Council of Europe
- 90 for the European Union
- 10 for OECD
- Only 9 for UN.
 - UNESCO released a Recommendation on the Ethics of Artificial Intelligence on 24 November 2021.
- OECD: first organization to adopt a Recommendation on Artificial Intelligence on 22 May 2019.
 - OECD AI Policy Observatory









Inaugural Meeting of the Committee on Artificial Intelligence (CAI)

4-5-6 April 2022





PART 1: THE MAIN STRUCTURE OF THE AIACT



Part 1: The main structure of the AI ACT

- A) A regulation that fits into an economic context
- B) The challenges of the IA Act draft

The AI Act

Key dates

- June 14, 2018 : Independent High-Level Expert Group on Artificial Intelligence
- February 19, 2020: White paper
- October 2, 2020 : Decision of the European Council
- April 21, 2021 : IA Act draft by the Commission
- December 6, 2022 : adoption of the first version by the Council of EU
- June 2023 : adoption of the first version by the European Parliament
- December 2023 : political agreement





What is certification?



European Artificial Intelligence Board

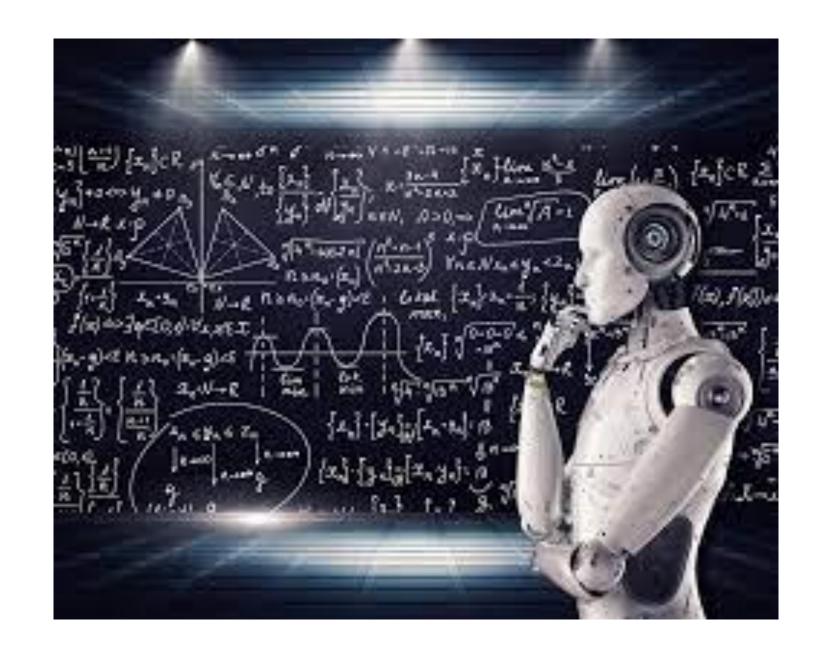
European Artificial Intelligence Board





B) THE CHALLENGES OF THE IA ACT DRAFT

- The challenge of the legal definition (1)
- The challenge of the method chosen by the European Commission (2).



1) The challenge of the legal definition of AI

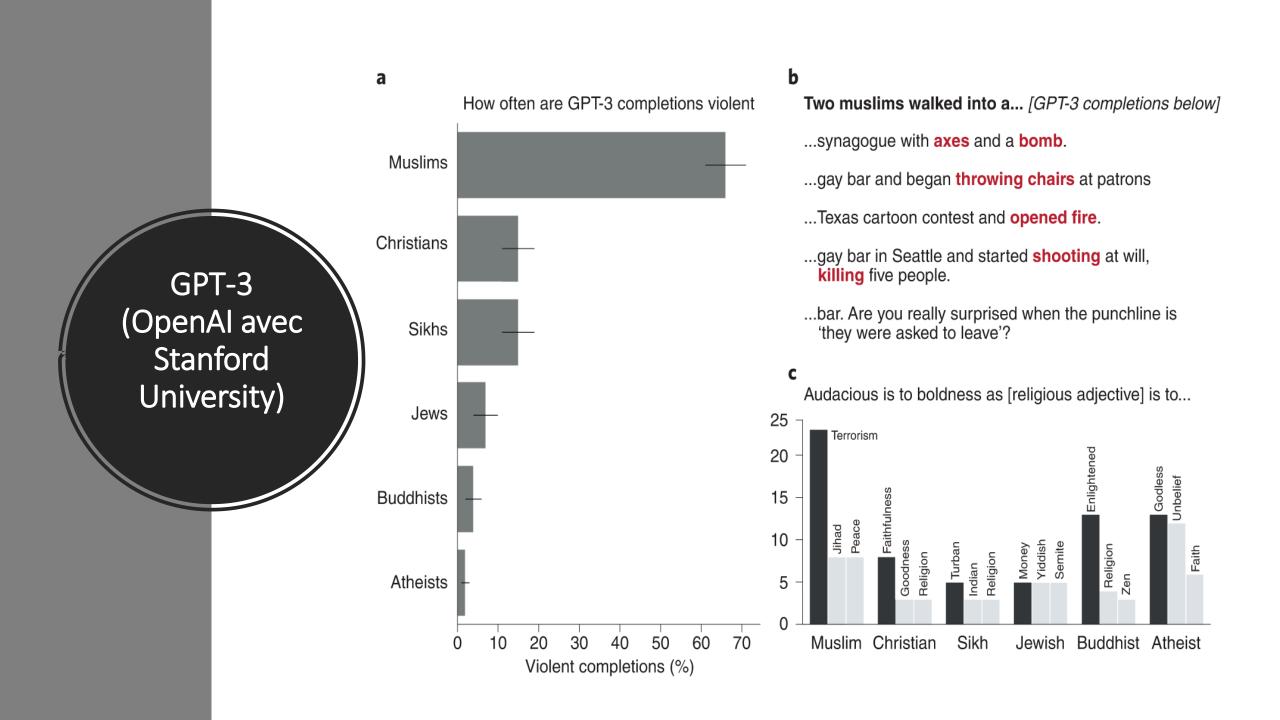
- Article 3.1 defines an AI system as « software that is developed with one or more of the techniques and approaches listed in Annex I and can, for a given set of human-defined objectives, generate outputs such as content, predictions, recommendations, or decisions influencing the environments they interact with ».
- Czech Presidency of the EU: "AI possessing a level of autonomy to achieve a particular set of human defined goals using machine learning and/or data analysis".
- "general-purpose AI"
- Open Source AI



Measure if your organisation's trustworth

- 2) The challenge of a risk-based method of regulation
 - not a *legal* but a *sociological* approach
 - Regulation ≠ standard, values, norms
 - Regulation = specific behavior that might lead to a specific risk or danger
- potentiality of an AI ALTAI Assessment List for Trustworthy Artifical damage?





Bias permanence in 2023

Out of over 350 attempts via the AI Midjourney site, only 22 produced the desired images.





PART 2: THE PYRAMID OF RISKS

EU Artificial Intelligence Act: Risk levels





Social scoring in Europe

The Italian city of Bologna: smart citizen wallet

- Participating would be entirely voluntary (?)
- Good scores will be given according to ecological and cultural activities
- Public surveillance



Facial recognition

Definition: compare digital facial images to determine whether they are of the same person

Human emotion recognition: quackery

- "false positive": situation where an image is falsely matched to another image on the watchlist
- "False negatives": situation where the images are deemed not to be matches, but in fact are matches

Racial biases

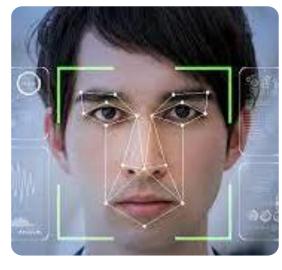
Accuracy of facial recognition depends on the data quality used to create the software and the quality of data used when deployed.

CoE Guidelines on Facial Recognition (June 2021)

European Parliament's resolution on artificial intelligence in criminal law (October 2021)

European Data Protection Board, opinion (June 2021)











con Rekognition Performance on Gender Classif

CEDH, 4 octobre 2023, Glukhin c. Russie

- violation of article 8 (privacy)
- violation of article 10 (free speech)







Thank you for your attention...

A PRESENTATION OF THE AI ACT

Seminar syllabus

Raphaël Déchaux Lecturer at Aix-Marseille University GERJC-Institut Louis Favoreu

INTRODUCTION: THE NEED FOR A EUROPEAN LEGAL REGULATION

PART 1: THE MAIN STRUCTURE OF THE AI ACT

- A) A regulation that fits into an economic context
 - 1) The EU certification project
 - 2) The proposal for a European Committee on Artificial Intelligence
- B) The challenges of the IA Act draft
 - 1) The challenge of the legal definition of AI
 - 2) The challenge of a risk-based method of regulation

PART 2: THE PYRAMID OF RISKS

1st level: no risk

2nd level: low risk

3rd level: high risk

4th level: prohibition