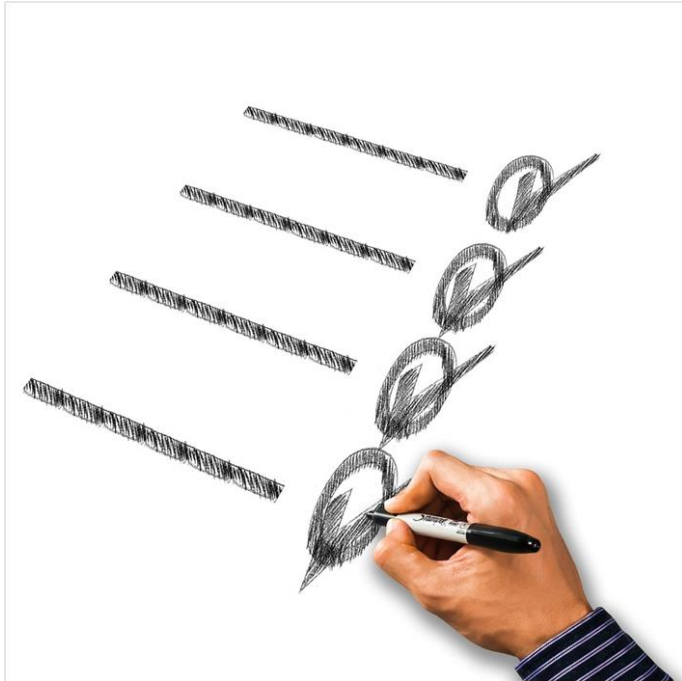


Artificial intelligence in judicial decisionmaking

AI: challenges and opportunities for courts

Dory Reiling PhD. Mag Iur.

My topics



- ✓ AI in court practice
- ✓ “Predictive” “justice”
- ✓ Ethical principles for the use of AI
- ✓ Challenges for courts

Source: Reiling, A.D. (Dory), 2020. Courts and Artificial Intelligence. *International Journal for Court Administration*, 11(2), p.8. DOI: <http://doi.org/10.36745/ijca.343>

Courts have different processes

		-	Outcome unpredictable?	+
Party relation	-	1 title	4 judgment	
	+	2 notarial	3 settlement	

Source: A.D. Reiling, *Technology for Justice, how information technology can support judicial reform* (diss. VU Amsterdam) *Leiden*: Leiden University Press 2010, p. 111-122.

... have different r

structure information

help with research + analytics

Outcome unpredictable?

Part relation

1 title	4 judgment
2 notarial	3 settlement

support a solution explorer - maybe

support a solution explorer - maybe make predictions

...ce, how information tec
University Press 2010, p. 111-122.

“Predictive” “Justice”



- Unpredictable court case outcomes are a risk
- Principle: past judgments are correct
- Secure data
- Correct data
- Trained algorithm

Predicting ECHR outcomes: 79% accuracy



- Complexity reduction done in process and the decisions
- *Claim: 79% accuracy on average*
- Is 79% good?
 - Yes/no: 50% probability,
 - All cases: 84% probability
- ***Judicial decision-making is significantly affected by the stimulus of the facts***

Source: Aletras N, Tsarapatsanis D, Preoțiu-Pietro D, Lampos V. 2016. 'Predicting judicial decisions of the European Court of Human Rights: a Natural Language Processing perspective', *PeerJ Computer Science* 2:e93 <https://doi.org/10.7717/peerj-cs.93>

Possible AI for a Solution Explorer



- ✓ Use chatbot technology
- ✓ Voice recognition and form completion
- ✓ Content translation
- ✓ Forecasting possible outcomes

EUROPEAN COMMISSION FOR THE EFFICIENCY OF JUSTICE (CEPEJ)

European ethical Charter
on the use of Artificial Intelligence in
judicial systems and their environment

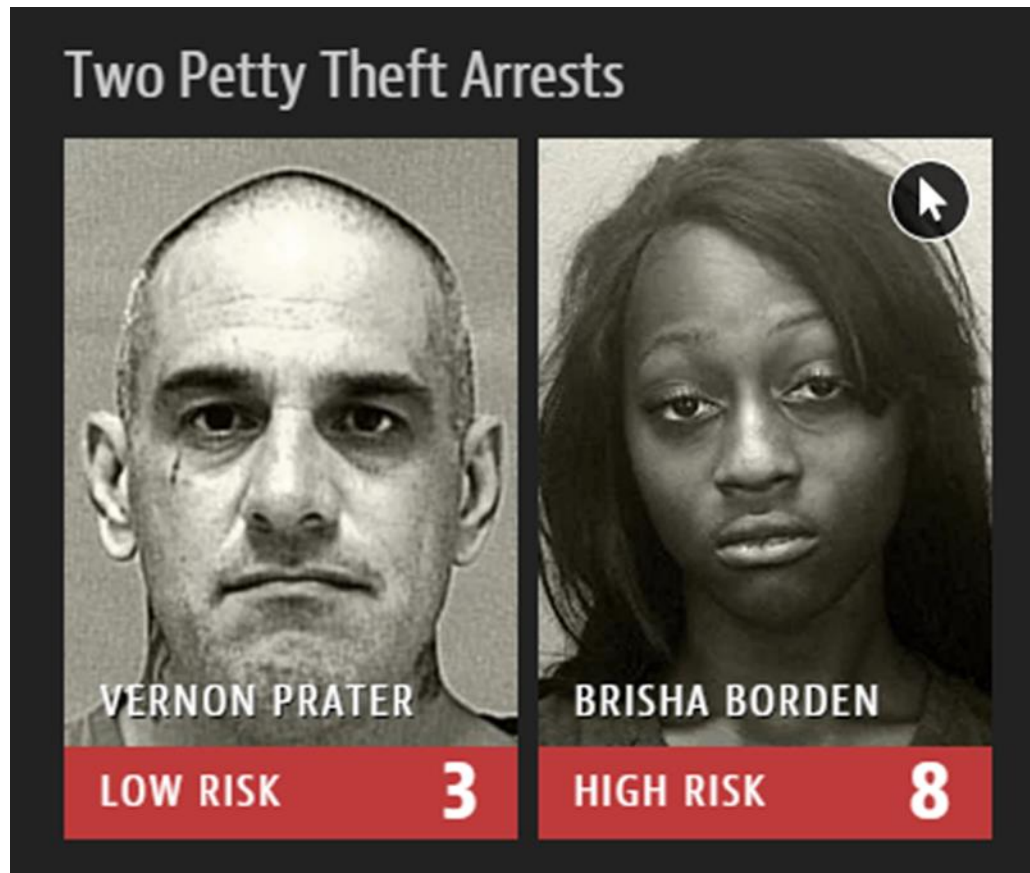


Adopted at the 31st plenary meeting
of the CEPEJ (Strasbourg, 3-4 December 2018)

European ethical Charter for the use of AI
in judicial systems and their environment

- ✓ 1 Respect for fundamental rights
- ✓ 2 **Non-discrimination**
- ✓ 3 Quality and security
- ✓ 4 **Transparency**, impartiality and fairness
- ✓ 5 **Under human control**

Non-discrimination



Prevent discrimination between individuals or groups of individuals

- ⊖ Distinction we consider unfair
- ⊖ Unfair treatment of different people

Risk assessments in custody, sentencing and parole (COMPAS and ARNOLD)

- Cause:
 - ! ? Biased judges?
 - ! ? Biased laws?
 - ! ? Biased programmers?
 - ! ? Lack of data?
 - ! ? Bad algorithms?

Transparency is current NL case law



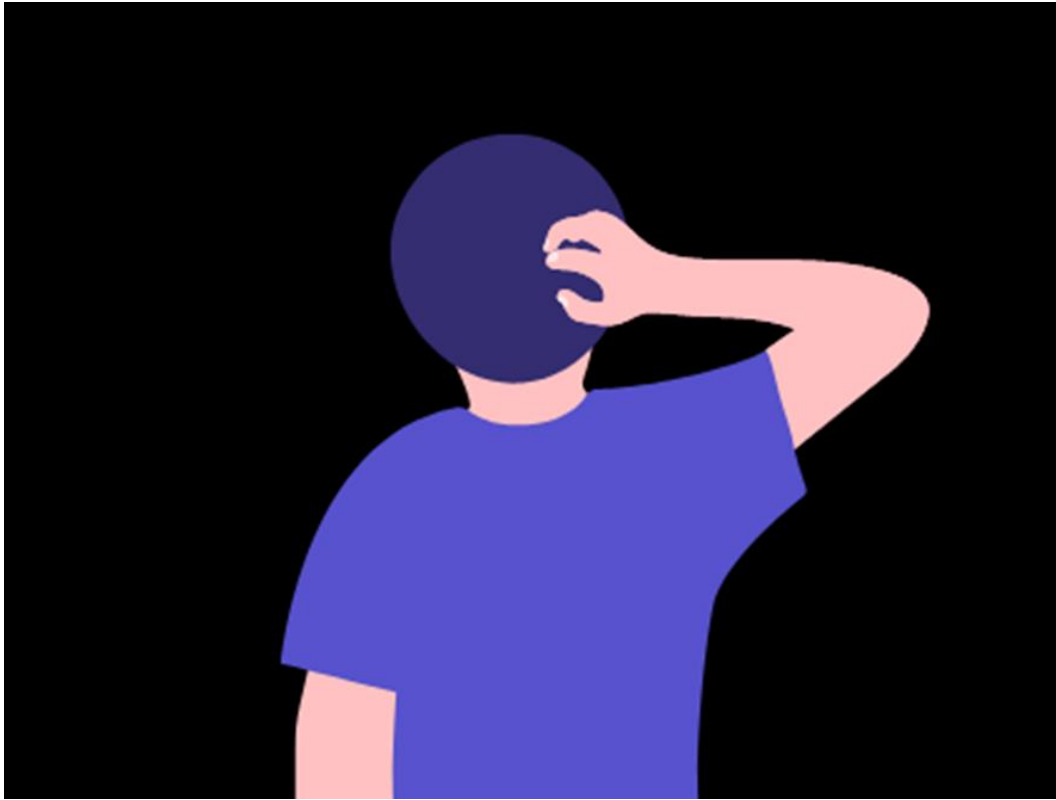
- NL Supreme Court and Council of State:
 - full, timely and appropriate disclosure
 - (ex ante or ex post?)
 - to assess the choices made and the data and assumptions used, so as
 - to ensure effective legal protection against decisions based on those choices, data and assumptions, with the possibility of judicial review by the courts.

[ECLI:NL:RVS:2017:1259](#)

[ECLI:NL:RVS:2018:2454](#)

[ECLI:NL:HR:2018:1316](#)

Challenges for courts: AI under user control



- ✓ Preclude a **prescriptive approach**
---> The computer does not decide on its own
- ✓ Ensure that users are **informed actors**
---> Users understand what the AI does
- ✓ Users are **in control** of their choices
---> Users can decide what to do with the AI's result

Challenges for court: judge profiles



Predictice
Au coeur
de la justice

Analysez des millions de décisions
de justice en 1 seconde

7 jours d'essai offerts

The image is a promotional banner for 'Predictice'. It features a dark blue background with white text. On the right side, there is a 3D illustration of a yellow magnifying glass focusing on a document, with several other documents and data charts floating around it, suggesting a process of analyzing large volumes of legal data.

- Profiling judges
- What for?
- By whom?
- By others
- By their own court (system)
- Ethical, legal principles:
- Regulation, policy?
- Ban?