LCO CDO

LAW COMMISSION OF ONTARIO
COMMISSION DU DROIT DE L'ONTARIO

ACCESS TO JUSTICE WEEK

DATA AND DESIGN SYMPOSIUM

OCTOBER 30, 2019

Introduction – LCO Digital Rights Project

- Law Commission of Ontario (www.lco-cdo.org):

    - Law reform agency located at Osgoode Hall Law School
    - Recent projects: Class Actions, Internet Defamation, Last Stages of Life, Capacity and Guardianship

- LCO Digital Rights Project:

    - AI and Algorithms in [Criminal Justice System](#)
    - AI and Algorithms in Administrative and Civil Justice System
    - Consumer Protection in Digital Marketplace
    - [Access to Justice and Legal Aid](#)
    - [AI for Lawyers](#)
    - [LCO/Mozilla Roundtable on Digital Rights and Digital Society](#)

AI, Algorithms in Law and Justice

- How are AI, algorithms and automated decision-making used in law and justice?

  - Legal information, legal advice and A2J digital services ("Steps to Justice" "Clicklaw" "Legal Line")
  - Robot lawyers, including e-discovery, legal research, smart contracts, automated pleadings; AI-driven litigation strategy ("ROSS Intelligence" "Willful" "Legal Zoom" "Wonder.Legal" "Clausehound")
  - Predictive analytics ("Blue J Legal" "Lex Machina")
  - Decision-making in public agencies, courts, tribunals

    (Source: Justice Lorne Sossin, CIAJ Annual Conference, October 16, 2019)

AI, Algorithms in Public Law Decision-Making

- AI/algorithms *already* used in many government/public law applications
  - Tools used for *investigations* and to *support decision-making* on important rights, entitlements
  - Most examples from US and UK

- Notable civil/administrative applications include:
  - Child welfare, government benefits, fraud detection, public health and education
  - National security
  - Immigration and visitor determinations

- Most extensive use in criminal justice, especially in US:
  - Surveillance, including facial recognition
  - Investigations, including "predictive policing"
  - Bail and sentencing, including pre-trial risk assessments
  - Corrections, including inmate classification and parole

Case Study: Algorithms and Bail

- Most extensive use of algorithms in justice system is in US, especially bail

- Pretrial risk assessments (RA):
    - RAs predict likelihood someone will miss court date or commit crime before trial ("recidivism")
    - RAs apply weighted list of risk factors against historic data to create "risk score" for accused
    - Scores used by judges to help assess whether accused should be released, conditions, detained

- Exponential growth of RAs to support of evidence-based bail reform

- RAs were widely supported at outset, but many original supporters now object

(See generally, Logan Koepke and David Robinson, *Danger Ahead: Risk Assessment and the Future of Bail Reform*)

Pubic Safety Assessment (PSA)

Standard Pretrial Risk Assessment Report

(Arnold Ventures, *Public Safety Assessment*)

12A Standard PSA Report

Name: John Defendant **Arrest Date:** 06/15/17
PID: 123456 **PSA Completion Date:** 06/16/17

Current Charge(s): 14-113.9 FINANCIAL CARD THEFT F 1

PSA Score

FAILURE TO APPEAR

1	2	3	4	5	6

NEW CRIMINAL ACTIVITY

1	2	3	4	5	6

NEW VIOLENT CRIMINAL ACTIVITY FLAG: NO

Risk Factors:

1.	Age at Current Arrest:	23 or Older
2.	Current Violent Offense:	No
	2a. Current Violent Offense and 20 Years Old or Younger:	No
3.	Pending Charge at the Time of Offense:	No
4.	Prior Misdemeanor Conviction:	Yes
5.	Prior Felony Conviction:	Yes
	5a. Prior Conviction:	Yes
6.	Prior Violent Conviction:	0
7.	Prior Failure to Appear in Past 2 Years:	1
8.	Prior Failure to Appear Older than 2 Years:	Yes
9.	Prior Sentence to Incarceration:	Yes

Presumptive Release Level

Based on the Release Conditions Matrix, the defendant's presumptive release level is **Release Level 2.**

Data/Design Issue #1: Disclosure

- High-priority administration of justice and access to justice issue.

- "Black box" criticism

- Access to Justice Issues/Questions:
  - How to ensure development or use of AI/algorithms are publicly disclosed?
  - More complex questions:
    - What is disclosed and when?
    - Disclosure of training data, software, source code, policy guidance?
    - Public vs. private systems?

Data/Design Issue #2: Historic Data and Bias

- Basic argument: bias in, bias out.
  - Criminal Justice: Training data reflects *generations* of discrimination
  - If data is inherently discriminatory, outcomes will inevitably be discriminatory

- Many say data discrimination means RAs should *never* be used in criminal justice

- Others give qualified support for RAs:
  - Algorithmic affirmative action
  - RA bias more transparent than subjective bias
  - Use RA for discrete purposes or to identify needs

- Access to Justice Issues/Questions:
  - Not all data is discriminatory, but no data is neutral
  - Is discrimination issue insurmountable in criminal justice/other contexts?
  - Data science issues and best practices (model bias, statistical fairness, data quality, relevance, etc)

Data/Design Issue #3: Understanding Predictions

- How to ensure predictions and tools are used/interpreted appropriately?

- Concern: Automated prediction become de facto decision

- Access to Justice Issues/Questions:
  - Automation bias
  - "Scoring" and risk categories
  - Group predictions vs individual decision-making
  - How to ensure justice professionals, clients, and public understand data issues and statistical results?

Data/Design Issue #4: Predictions vs. Policy

- For most part, current systems generate statistical predictions

- Policy-makers/courts determine *consequence* of predictions
  - What does a high bail risk score mean? Detain? Conditions? Release without bail hearing?
  - Consequence of prediction based on human choices, law, policy, services – not math

- Predictions can be used to support restrictive *or* permissive policies

- Access to Justice Issues/Questions:
  - What are the "decision frameworks" that accompany AI/algorithms?
  - Who is involved in this process?

Data/Design Issue #5: Due Process

- Use of AI/algorithms by courts and tribunals raise numerous due process/fairness issues:
  - Notice, hearings
  - Impartial decision-maker, ability to challenge decisions
  - Reasons, appeals and remedies

- Due process/fairness is context-specific

- Many models of regulation, algorithmic accountability, AI audits

- Access to Justice Issues/Questions:
  - How to ensure *AI systems* protect due process?
  - How to ensure *tribunals/*courts protect due process?
  - Impact of machine learning systems (ex. impact on "explainability")
  - Impact on self-represented?

Some Ideas to Think About

- AI and Algorithms: New frontier of A2J

- Urgent need to learn the technology, learn new skills (data science, "litigating AI")

- A2J community must involve new stakeholders (technologists, digital rights)

- Advocates should think both defensively and opportunistically

- Must work collaboratively

More Information

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