This workshop was held at the 2018 Equal Justice Conference in San Diego, California.

Title:
Due Process & Ethics In The Age Of Tech And Innovations In The Justice System (ETHICS)

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Courts, legal service providers, and others in the justice community are increasingly adopting new technologies like machine learning, Big Data analytics, e-filing, automated triage, and online dispute resolution. New technologies always offer a mixture of risks and opportunities, but how do decision-makers cut through the hype they read in the press and the sales pitches they hear from vendors? This interactive session will start a conversation within the larger justice community about how we can inform and guide decision-makers so that these technologies are implemented in ways that protect the interests of our client populations. We need to ensure that ethics and policy considerations drive technology instead of technology and innovations mandating policy and practice changes.

We will explore questions such as: How do we prevent software vendors from effectively setting policy within courts and government agencies? Has delegation of traditional court functions to vendors go too far? Promoting on-line dispute resolution has the potential for access to justice, but how can courts ensure that litigants still have a meaningful right to their day in court? When courts use AI to help litigants find information, how can they ensure the systems are providing high quality service? How far should legal aid organizations go in delegating tasks like triage and intake to technology? Court data may be "public information," but when it is available easily on the internet, scam artists can get to a defendant before the process server does. What should court clerks know about the dangers of public access systems?
Governance and Ethics for Big Data, Predictive Analytics and Machine Learning Systems

Abhijeet Chavan, Angela Tripp, and Jonathan Pyle

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Michigan agency review finds 70% error rate in jobless fraud findings

Data glitch was apparent factor in false fraud charges against jobless claimants

Broken: The human toll of Michigan's unemployment fraud saga
Algorithmic Impact Assessments: Toward Accountable Automation in Public Agencies

An automated decision system from The Twilight Zone's "Nick of Time" (1960)
Artificial Intelligence

- Machine learning, deep learning
- Natural language processing
- Natural language generation
- Audio & speech analysis
- Machine vision
- Automation
- Robotics
- ....
Cloud Computing

- Scalable
- Distributed
- Available
Big Data

- Volume
- Variety
- Velocity
Machine Learning

Statistical process that derives rules from data to gain insights or make predictions.
Deep Learning

Evidence Based

Recommendation Engines

Machine Learning Systems

Predictive Analytics

Natural Language Generation

NLP/Text Mining

Prescriptive Analytics

Available Features

Prediction

Assessment

Advice

INPUT LAYER

HIDDEN LAYERS

OUTPUT LAYER

Possible Answers

Documents

Unstructured Data

Structure

Trends & Correlations

Recommendation

Available Features

Prediction

Assessment

Advice

Data

Facts

Assessments

Language

“John Boehner”

“IRS”

“Barack Obama”

“US Congress”

“January 10, 2015”

“Tax Reform”

DATA

EXTRACTION RULES

“Data”

Facts

Assessments

Language

“Document”

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Michael Fisher @Fisher85M https://twitter.com/Fisher85M/status/939934495423238144
Automation

- Algorithm-driven systems
- Virtual Assistants, Chatbots
- Online Dispute Resolution (ODR)
- ...
“Algorithms are always the product of social, technical, and political decisions...this is where biases, values, and discrimination disappear into the black box behind the computational curtain.”

Laura Forlano
Invisible Algorithms, Invisible Politics
“The problem is not that we don’t understand AI – it is that we don’t understand ethics and what it means to be human.”

*Joanna Bryson*  
Princeton University
Ethics

- Fairness
- Accountability
- Transparency
Legal Services Community Principles and Guidelines for Due Process and Ethics in the Age of AI
Developed by our community through community discussions.
Engage our community and educate ourselves about new data-driven, algorithm-powered technology that is transforming our profession.
2

Discuss and identify the impact of new technology on due process and ethics.
Develop a set of community principles and guidelines to protect and promote our professional values.
Guide and encourage use of principles and guidelines among courts, governmental agencies, legal aid programs, bars, and others in the justice community.
Examples
1 - Court decisions via ODR

- Resolve your traffic ticket, warrant, etc. online by engaging in mediation w/court
- Potential benefits: convenience to people; efficiency of courts
- Potential Problems: introduce ex parte communication; rely on algorithms to suggest resolutions; algorithm elements different for each court and each judge
- How could this be improved? What steps are needed? Who can do them?
2 - Algorithms used in sentencing, ability to pay, parole

- Closed algorithms used to determine a defendant's ability to pay a fee/fine, suggest a sentence in a criminal case, suggest whether parole should be granted.
- Potential benefits: removes human bias, efficiency
- Potential Problems: lack of validity, codifies human bias by hiding it in an algorithm that no one can know, question, appeal
- How could this be improved? What steps are needed? Who can do them?
3 - Mandatory Online Foreclosure Mediation in PA

- On-line storage area for exchanging documents
- Potential benefits: no more “I didn’t receive that fax”
- Potential Problems raised by it: ex parte communication, loss of flexibility
- How could this be improved? What steps are needed? Who can do them?
4 - Unemployment Compensation Benefits “Modernization” in MI, PA

- MiDAS, a computerized system for handling unemployment applications and detecting fraud in MI.
- Potential benefits: efficiency; “curbing waste”;
- Potential Problems: total lack of human oversight created huge human suffering, system improperly found fraud in 93% of cases
- How could this be improved? What steps are needed? Who can do them?
5 - Deployment of AI based tool at a Legal Services Organization (hypothetical)

- Automatic document identifier
- Potential benefits: 24/7 meaningful legal service
- Potential Problems: it wouldn't be perfectly accurate
- How could this be improved? What steps are needed? Who can do them?
Principles & Guidelines
1 - Transparency

● All people impacted by automated data-driven decision-making should be informed.
● End-users should be informed of rights they are giving up by voluntarily engaging in a new system or when a mandatory system is put in place or changes.
● Decisions influenced by automated processes and data sets should be explained in plain language, including what factors were a part of the decision.
● All new innovations must be equally accessible to all who will be impacted by it.
2 - Accountability

- Automated data-driven decisions should be logged and auditable.
- All automated processes should provide a neutral human review of reported problems and challenges to the results.
- Systems utilizing automated decision making should include a clearly defined process for challenging outcomes.
- Data/algorithm-driven systems/processes should have human oversight to the extent needed to ensure it meets project objectives.
3 - Reliability

- Innovations should promote consistency across a jurisdiction.
- Innovations should include mechanisms for evaluation and improvement, testing validity, and should be required to demonstrate reliability based on feedback loops.
4 - By Design

- Algorithms must not codify human biases or structural racism and other biases.
- Representatives of all groups impacted should be involved in planning new systems.
- When considering improvements to legal processes, prioritize access to justice and due process at same level as efficiency/profits.
- People have a right to recourse and the ability to contest and correct information used to make an automated data driven decision.
Implementation

- Institutional buy-in - starts with individuals?
- Institutional support - who are the leaders?
- Communication - what are the best routes?
- Collaboration - what else is being tried?
- Practical Steps - what are they?
  - Change existing decision-making practices
  - Bring together committees within orgs
  - Who has authority to demand use?
  - What about systems already in place that don’t meet the guidelines?