

# **Understanding Bias, Privacy and Legality Associated with AI**

Ronald L. Chichester, J.D.  
Artificial Intelligence in Telecom  
Webinar  
May 18, 2020

# Overview

- Definitions
- Agency
- Ownership
- Bias
- Privacy
- Liability



# Disclaimer

**I am a lawyer**

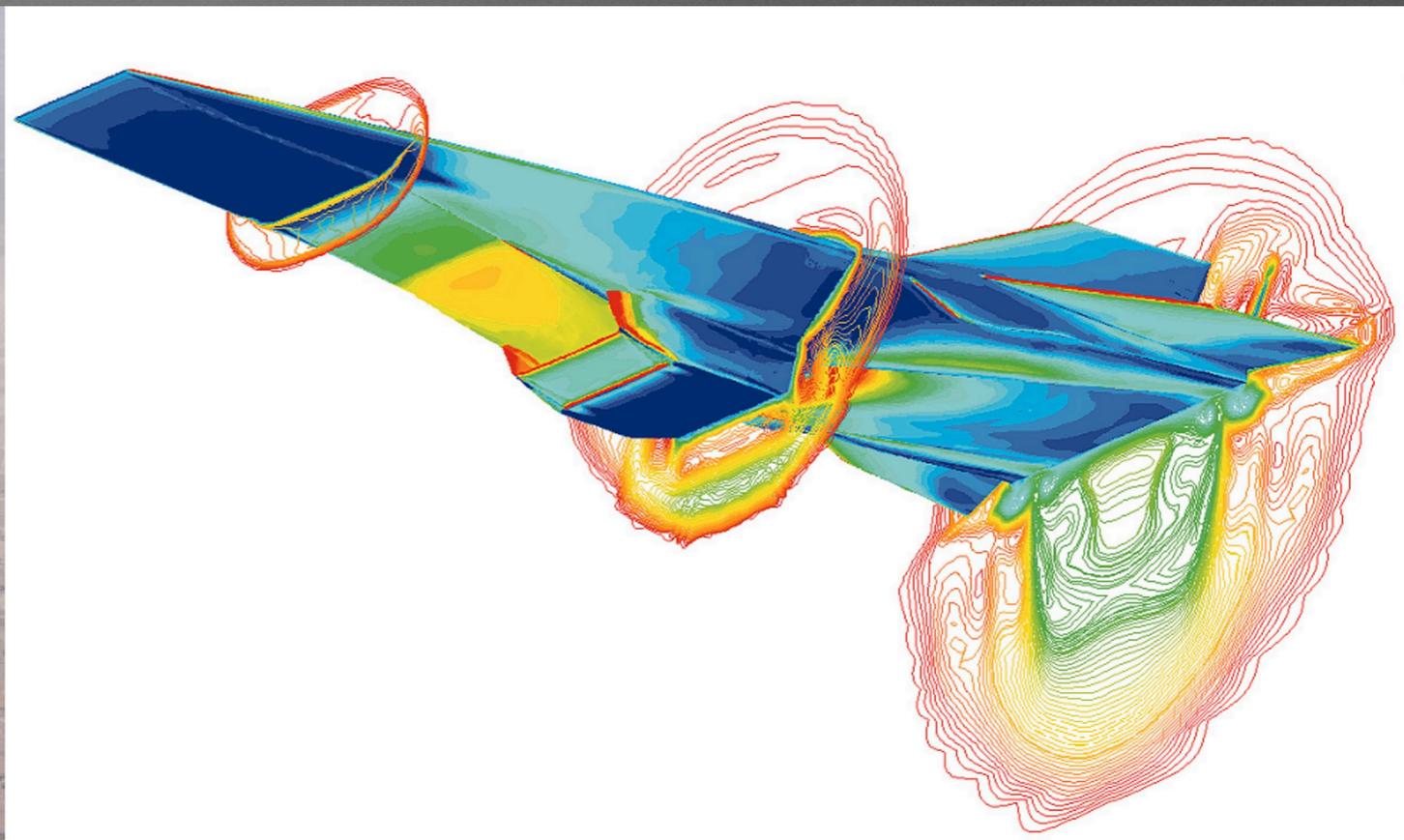
But I am not *your* lawyer

So this is *not* legal advice

Because if it was, it would be followed by a bill

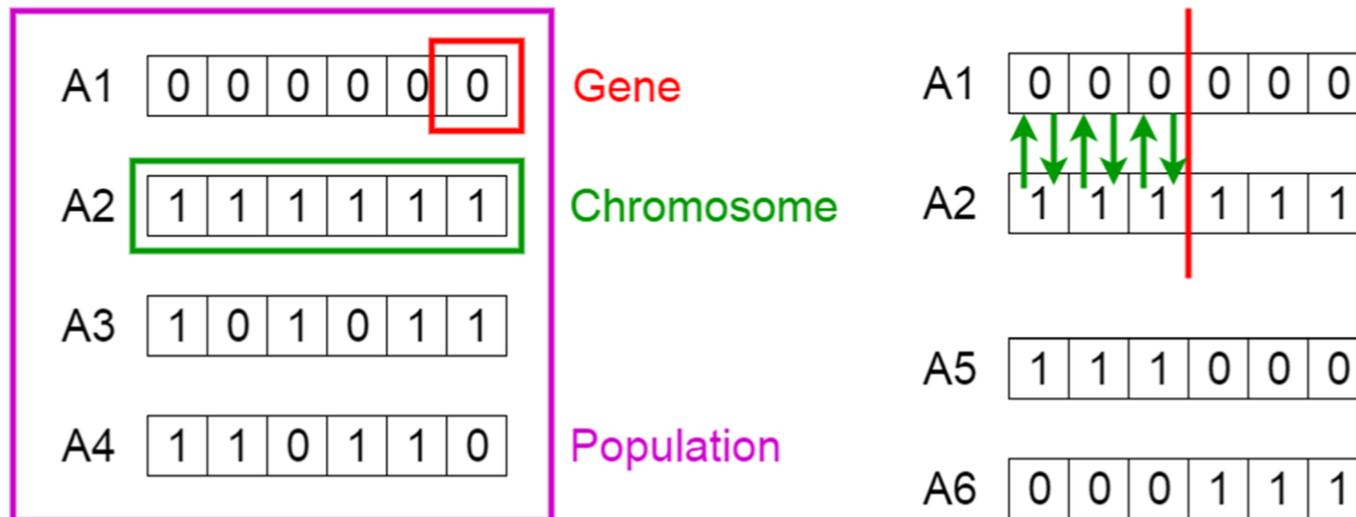
**BTW, I'm also a  
Legal Engineer**

**Where I Came From...**



# Where I got started with AI

## Genetic Algorithms



UNIVERSITY OF MICHIGAN

# Transition to the Legal Field



US 20020143700A1

(19) **United States**  
(12) **Patent Application Publication** (10) **Pub. No.: US 2002/0143700 A1**  
**Wu** (43) **Pub. Date: Oct. 3, 2002**

(54) **METHOD AND APPARATUS FOR INDIVIDUAL-CENTRIC USE OF THE INTERNET**

(57) **ABSTRACT**

(76) Inventor: **Guangdian Guordon Wu**, Houston,

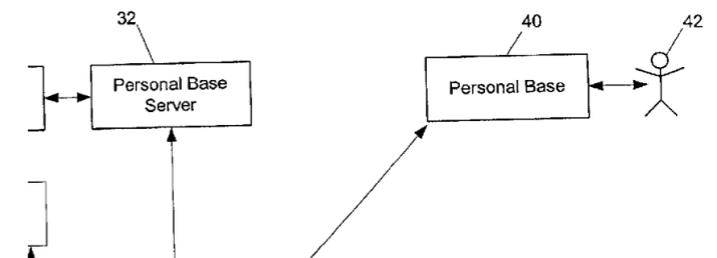
An individual-centric Internet is provided with a personal base process on a computer system. The computer system is equipped with multiple nodes that are interconnected to facilitate the communication between the nodes. The personal base service includes a personal base instance that is typically in software on at least one of the nodes of the computer system, such as a network. The personal base instance is designed to communicate with a user by any digital or analog device, such as a telephone, personal computer, personal digital assistant, or the like. A personal base server is instantiated on at least one of the nodes on the computer system and is in operative communication with the personal base instance. The personal base server is used to communicate with other personal bases or other nodes on the computer system or network in order to insulate the user from other elements of the computer system.

F 17/60  
0; 705/1

## Ownership of Data



"No, it's MY data!"



# Using NLP and ML in Law

## Ashcroft v. Iqbal, 556 U.S. 662, 129 S. Ct. 1937, 173 L. Ed. 2d 868, 77 U.S.L.W. 4387 (2009), Court Opinion

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POINTS OF LAW

pleading must contain a "short and plain statement of the claim showing that the pleader is [\*678] entitled to relief." As the Court held in *Twombly*, 550 U. S. 544, the pleading standard **Rule 8** announces does not require "detailed factual allegations," but it demands more than an unadorned, the-defendant-unlawfully-harmed-me accusation. *Id.*, at 555 (citing *Papasan v. Allain*, 478 U.S. 265, 286 (1986)). A pleading that offers "labels and conclusions" or "a formulaic recitation of the elements of a cause of action will not do." 550 U. S., at 555. Nor does a complaint suffice if it tenders "naked assertion[s]" devoid of "further factual enhancement." *Id.*, at 557.

To survive a motion to dismiss, a complaint must contain sufficient factual matter, accepted as true, to "state a claim to relief that is plausible on its face." *Id.*, at 570. A claim has facial plausibility when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged. *Id.*, at 556. The plausibility standard is not akin to a "probability requirement," but it asks for more than a sheer possibility that a defendant has acted unlawfully. *Ibid.* Where a complaint pleads facts that are "merely consistent with" a defendant's liability, it "stops short of the line between possibility and plausibility of 'entitlement to relief.'" *Id.*, at 557 (brackets omitted).

Two working principles underlie our decision in *Twombly*. First, the tenet that a court must accept as true all of the allegations contained in a complaint is inapplicable to legal conclusions. Threadbare recitals of the elements of a cause of action, supported by mere conclusory statements, do not suffice. *Id.*, at 555 (Although for the purposes of a motion to dismiss we must take all of the factual allegations in the complaint as true, we "are not bound to accept as true a legal conclusion couched as a factual allegation" (internal quotation marks omitted)). **Rule 8** marks a notable and generous departure from the hypertechnical, code-pleading regime of a prior era, but it does not unlock the doors of discovery for [\*679] a plaintiff armed with nothing more than conclusions. Second, only a complaint that states a plausible claim for relief survives a motion to dismiss. *Id.*, at 556. Determining whether a complaint states a plausible claim for relief will, as the Court of Appeals observed, be a context-specific task that requires the reviewing court to draw on its judicial experience and common sense. 490 F. 3d, at 157-158. But where the well-pleaded facts do not permit the court to infer more than the mere possibility of misconduct, the complaint has alleged — but it has not "show[n]" — "that the pleader is entitled to relief." Fed. Rule Civ. Proc. 8(a)(2).

In keeping with these principles a court considering a motion to dismiss can choose to begin by identifying pleadings that, because they are no more than conclusions, are not entitled to the assumption of truth. While legal conclusions can provide the framework of

▶ Ashcroft v. Iqbal, 556 U.S. 662, 129 S. Ct. 1937, 173 L. Ed. 2d 868, 77 U.S.L.W. 4387 (2009), Court Opinion

▶ Bell Atl. Corp. v. Twombly, 550 U.S. 544, 127 S. Ct. 1955, 167 L. Ed. 2d 929, 2007 ILRC 1829, 23 ILRD 11, 41 CR 567, 75 U.S.L.W. 4337 (2007), Court Opinion

▼ Ass'n of Cleveland Firefighters v. City of Cleveland, 502 F.3d 545, 26 IER Cases 1105 (6th Cir. 2007), Court Opinion

The Supreme Court has recently clarified the law with respect to what a plaintiff must plead in order to survive a Rule 12(b)(6) motion. *Bell Atl. Corp. v. Twombly*, \_\_\_ U.S. \_\_\_, 127 S.Ct. 1955, 167 L.Ed.2d 929 (2007). The Court stated that "a plaintiff's obligation to provide the grounds of his entitlement to relief requires more than labels and conclusions, and a formulaic recitation of the elements of a cause of action will not do." *Id.* at 1964-65 (citations and quotation marks omitted). Additionally, the Court emphasized that even though a complaint need not contain "detailed" factual allegations, its "[f]actual allegations must be enough to raise a right to relief above the speculative level on the assumption that all the allegations in the complaint are true." *Id.* (internal citation and quotation marks omitted).

Citation Map

Related Points

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**ELECTRONIC DISCOVERY**

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Litigation  
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Justice  
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Metadata  
Intent  
Victims  
Order  
Security  
Exemption  
act  
Judge  
agreement  
Law  
Corporate  
Contract  
Income  
Litigation Support

**</ about\_me >**

# Definitions

**“We define AI as the study of agents that receive percepts from the environment and perform actions.”**

***– Stuart J. Russell & Peter Norvig  
Artificial Intelligence: A Modern Approach (Third Edition)***

“We define AI as the study of **agents** that receive percepts from a **jurisdiction** and perform **actions**.”

– *Ronald L. Chichester*



**Cognizance**

**&**

**Action**

“It is the combination of **cognizance** and **action** that entices judges and lawmakers to apply all of the **human-centric** law directly to **AI**, just as they did with **corporations**, with minimal (if any) modification.”

– *Ronald Chichester*

**That tendency in law has  
implications for bias, privacy  
and legality regarding AI**

**Why?**

Because law is the  
regulation of *actions*  
between  
*people*  
within a jurisdiction

**If law treats AI the same  
way as it treats people  
then...**

Then law will be the  
regulation of *actions*  
between  
*AI* and/or *People*  
within a jurisdiction

**People** can play many roles in  
the actions  
(humans, agents, companies)

So can **AI**

**Agency**



Principal



Agent



Third Party

# Law of Agency

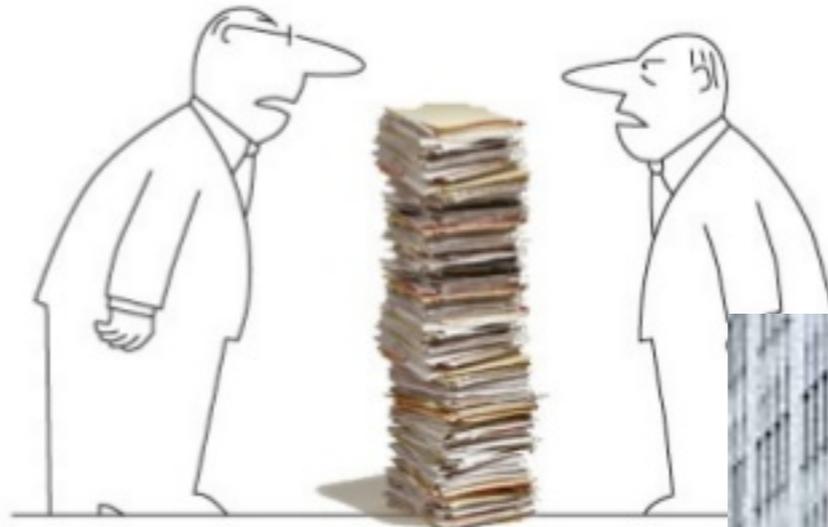
- Mainly a branch of Commercial Law concerning contracts
- Key is a “fiduciary relationship” to someone else (the “principal”)
- The agent is authorized to act on behalf the principal to create legal relations with a third party
- The principal can be bound (legally) based on what the agent does
- Authority of the agent can be *actual* or *implied...*
  - based on what the *third party* thinks!

# Legal Implications for AI Agents

- If the AI can pass the Turning Test, it can be mistaken for a human agent
  - So law of agency would apply
    - Liability of the Agent to the Third Party
    - Liability of the Agent to the Principal
    - Liability of the Principal to the Agent
    - Duties of the Agent
    - Termination of the Agency

**Ownership**

# Ownership of Data



*"No, it's MY data!"*



aka, "the Owners"

# How Can They Own AI?

- Four Intellectual Property Laws for Data and ML Models
  - Patents (for the design/use of the ML models)
  - Copyrights (for the data used to train the ML models)
  - Trade Secrets (for the model and/or the training data)
  - Trademarks (specifically trade dress, i.e., *how AI behaves*)



US005214746A

# United States Patent [19]

Fogel et al.

[11] Patent Number: **5,214,746**

[45] Date of Patent: **May 25, 1993**

[54] **METHOD AND APPARATUS FOR TRAINING A NEURAL NETWORK USING EVOLUTIONARY PROGRAMMING**

[75] Inventors: **David B. Fogel, San Diego; Lawrence J. Fogel, La Jolla, both of Calif.**

[73] Assignee: **Orincon Corporation, San Diego, Calif.**

[21] Appl. No.: **716,687**

[22] Filed: **Jun. 17, 1991**

[51] Int. Cl.<sup>5</sup> ..... **G06F 15/18**

[52] U.S. Cl. .... **395/23; 395/11; 395/21**

[58] Field of Search ..... **395/23, 13**

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*Primary Examiner*—Michael R. Fleming

*Assistant Examiner*—Robert W. Downs

*Attorney, Agent, or Firm*—Spencer, Frank & Schneider

[57] **ABSTRACT**

A method and apparatus for training neural networks using evolutionary programming. A network is adjusted to operate in a weighted configuration defined by a set of weight values and a plurality of training patterns are input to the network to generate evaluations of the training patterns as network outputs. Each evaluation is compared to a desired output to obtain a corresponding error. From all of the errors, an overall error value corresponding to the set of weight values is determined. The above steps are repeated with different weighted configurations to obtain a plurality of overall error values. Then, for each set of weight values, a score is determined by selecting error comparison values from a predetermined variable probability distribution and comparing them to the corresponding overall error value. A predetermined number of the sets of weight values determined to have the best scores are selected and copies are made. The copies are mutated by adding random numbers to their weights and the above steps

# Copyright

- Covers the “expression of an idea that is fixed in a tangible media by an author in an original fashion”
- Ideas and facts are not copyrightable
- If there is only one way to express something, then it cannot be copyrighted (Doctrine of Merger)
- However (and most importantly), the selection and arrangement of facts (e.g., data) **are** copyrightable
- Similarly, the code defining the layers, nodes and weights of a NN **are** copyrightable



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# List of datasets for machine-learning research

From Wikipedia, the free encyclopedia

(Redirected from [List of datasets for machine learning research](#))

These **datasets** are used for **machine-learning** research and have been cited in **peer-reviewed** academic journals. Datasets are an integral part of the field of machine learning. Major advances in this field can result from advances in learning **algorithms** (such as **deep learning**), computer hardware, and, less-intuitively, the availability of high-quality training datasets.<sup>[1]</sup> High-quality labeled training datasets for **supervised** and **semi-supervised** machine learning algorithms are usually difficult and expensive to produce because of the large amount of time needed to label the data. Although they do not need to be labeled, high-quality datasets for **unsupervised** learning can also be difficult and costly to produce.<sup>[2][3][4][5]</sup>

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## Machine learning and data mining



- Problems** [\[show\]](#)
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([classification](#) · [regression](#))
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V · T · E

```

import torch
import torch.nn as nn
import torch.nn.functional as F

class Net(nn.Module):

    def __init__(self):
        super(Net, self).__init__()
        # 1 input image channel, 6 output channels, 3x3 square convolution
        # kernel
        self.conv1 = nn.Conv2d(1, 6, 3)
        self.conv2 = nn.Conv2d(6, 16, 3)
        # an affine operation: y = Wx + b
        self.fc1 = nn.Linear(16 * 6 * 6, 120) # 6*6 from image dimension
        self.fc2 = nn.Linear(120, 84)
        self.fc3 = nn.Linear(84, 10)

    def forward(self, x):
        # Max pooling over a (2, 2) window
        x = F.max_pool2d(F.relu(self.conv1(x)), (2, 2))
        # If the size is a square you can only specify a single number
        x = F.max_pool2d(F.relu(self.conv2(x)), 2)
        x = x.view(-1, self.num_flat_features(x))
        x = F.relu(self.fc1(x))
        x = F.relu(self.fc2(x))
        x = self.fc3(x)
        return x

    def num_flat_features(self, x):
        size = x.size()[1:] # all dimensions except the batch dimension
        num_features = 1
        for s in size:
            num_features *= s
        return num_features

net = Net()
print(net)

```

# Copyright

- Four types of copyrightable works:
  - Original works
    - e.g., code from scratch, or original data set
  - Derivative works
    - e.g., modified original code, or modified original data set
  - Collective works (e.g., multiple data sets)
  - Compilation works (e.g., assembled and munged facts/data)

# Example Scenario

- Data scientist gathers pre-munged data set from a third party
- Data scientist adds more data and expands features in the data set
- ML engineer devises a neural network tailored to the task
- ML engineer uses that expanded data set to train the NN
- Resulting model moved to production
- Company hits exit strategy
  - The model is subject to a **due diligence** audit for violation of intellectual property rights (under **Representations & Warranties**)

# Example Scenario (cont.)

- Results:
  - Company owns the code to the NN *if*
    - the ML engineer was a W-2 employee or the NN was a “work made for hire”
  - To own the *model*, however, the Company...
    - ***Must*** have a license to use/derive new works from the pre-munged data found by the data scientist

**Why?**

**“Subject to sections 107 through 122, the owner of copyright under this title has the exclusive rights to do and to authorize any of the following:**

- (1) to reproduce the copyrighted work in copies or phonorecords;
- (2) to prepare derivative works based upon the copyrighted work;
- ...

**– 17 U.S.C. §106**

# Copyright Law

- Owner of the copyright has an **EXCLUSIVE** right to:
  - make copies of the work
  - make derivative works from the original work
- The right is created **IMMEDIATELY** upon saving the data file and/or source code file
  - No action or notice by the author is necessary

**What Can Go Wrong?**

# Thomson Reuters Sues ROSS Intelligence Claiming Theft Of Proprietary Data



By [Bob Ambrogi](#) on May 6, 2020

In what could be a Goliath v. David legal battle, legal research giant Thomson Reuters has filed a lawsuit against legal research startup ROSS Intelligence alleging that it surreptitiously stole content from Westlaw to build its own competing legal research product.

[The complaint](#), filed today in U.S. District Court in Delaware, alleges that ROSS “intentionally and knowingly” induced the legal research and writing company LegalEase Solutions to use its Westlaw account to reproduce

ROBERT J. AMBROGI



Is a Massachusetts lawyer, writer and media consultant. He also writes the blog [Media Law](#) and cohosts the legal affairs podcast [Lawyer2Lawyer](#)

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IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

THOMSON REUTERS ENTERPRISE	)	
CENTRE GMBH and	)	
WEST PUBLISHING CORPORATION,	)	
	)	
Plaintiffs,	)	C.A. No. _____
	)	
v.	)	<b>DEMAND FOR JURY TRIAL</b>
	)	
ROSS INTELLIGENCE INC.,	)	
	)	
Defendant.	)	

**COMPLAINT**

Plaintiffs Thomson Reuters Enterprise Centre GmbH (“Thomson Reuters”) and West Publishing Corporation (“West”) (collectively, “Plaintiffs”), for their Complaint, hereby allege against Defendant ROSS Intelligence Inc. (“ROSS”) as follows:

**NATURE OF THE ACTION**

1. Plaintiffs created and nurtured their well-known Westlaw product since its inception, including without limitation its unique West Key Number System (“WKNS”) and West Headnotes (collectively, “Westlaw Content”). ROSS is attempting to create a business by taking for itself critical features of Westlaw, without permission from or compensation to Plaintiffs. Upon information and belief, ROSS illicitly and surreptitiously used a then-Westlaw

2. This action seeks to recover damages that Plaintiffs have suffered and to prevent the irreparable harm that continues to threaten them as a result of ROSS's deceitful and willful copying of Plaintiffs' copyrighted content and organization, as well as ROSS's tortious interference with contract.

3. Specifically, upon information and belief, ROSS intentionally and knowingly induced a third-party called LegalEase Solutions, LLC ("LegalEase")—a legal support services company—to breach its contract with West by engaging in the unlawful reproduction of Plaintiffs' copyrighted content and distribution of that content *en masse* to ROSS. ROSS did so after asking for and explicitly being denied access to Westlaw by West on the basis that West does not give competitors access to its products. Thus, ROSS induced LegalEase to engage in this unlawful activity, knowing that it violated the terms of LegalEase's contract with West and that West would not grant ROSS a license to use Plaintiffs' content to create a competing product. ROSS committed direct copyright infringement by reproducing and creating a derivative work based on Plaintiffs' content, and is also secondarily liable for LegalEase's copyright infringement.

4. In short, ROSS has engaged, and continues to engage, in a pattern and practice of knowingly, intentionally, and willfully infringing Plaintiffs' copyrights. Further, it is obvious

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4. In short, ROSS has engaged, and continues to engage, in a pattern and practice of knowingly, intentionally, and willfully infringing Plaintiffs' copyrights. Further, it is obvious

**Oops!**

**Bias**

# So far, bias is prevalent in...

- Hiring
- Policing
- Financial Services
- Judicial Sentencing

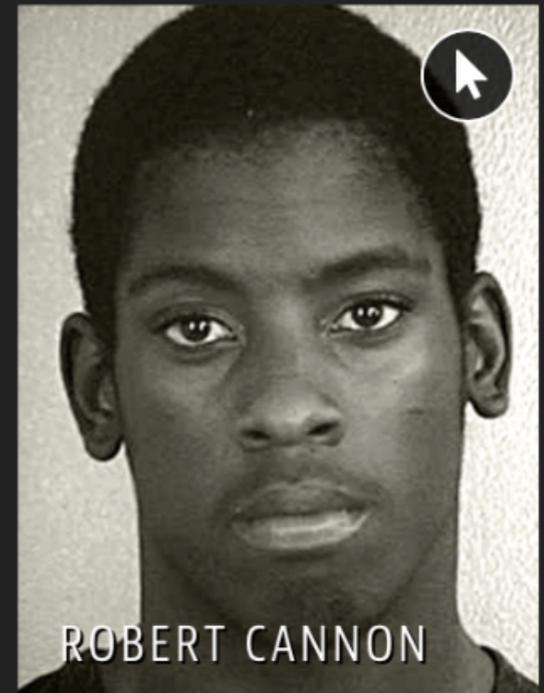
## Two Shoplifting Arrests



JAMES RIVELLI

LOW RISK

3



ROBERT CANNON

MEDIUM RISK

6

*After Rivelli stole from a CVS and was caught with heroin in his car, he was rated a low risk. He later shoplifted \$1,000 worth of tools from a Home Depot.*

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## Freddie Mac Using Shady AI Company for Mortgage Loans

ZestFinance is implicated in high-cost payday lending and backed by Peter Thiel. It's now working with a government-sponsored mortgage giant.

BY MAX MORAN OCTOBER 7, 2019



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### TRENDING NOW

Wait a Minute, Could John Roberts Block All of This?

BY SCOTT LEMIEUX

UAW Members' Resolve Stiffens as GM Strike Continues

<https://prospect.org/power/freddie-mac-using-shady-ai-company-for-mortgage-loans-ZestFinance/>

BUSINESS & ECONOMICS, RESEARCH

## Mortgage algorithms perpetuate racial bias in lending, study finds

By [Public Affairs](#), UC Berkeley | NOVEMBER 13, 2018



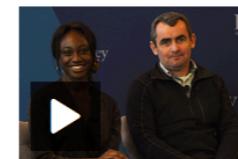
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Ask Me Anything — Chancellor Carol Christ...



Joining forces for a better Berkeley

### RELATED STORIES



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Does being a 'superwoman'

**I was involved in an AI /  
FinTech case...**

**...as a lawyer representing  
the Lending Company**

# Racial Bias in Lending

- Equal Credit Opportunity Act (ECOA)
- Fair Housing Act (FHA)

# Equal Credit Opportunity Act

- The ECOA forbids credit discrimination on the basis of race, color, religion, national origin, sex, marital status, age, or whether you receive income from a public assistance program. Creditors may ask you for most of this information in certain situations, but they may not use it as a reason to deny you credit or to set the terms of your credit. They are never allowed to ask your religion. Everyone who participates in the decision to grant credit or in setting the terms of that credit, including real estate brokers who arrange financing, must comply with the ECOA.

# Equal Credit Opportunity Act

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# Fair Housing Act (FHA)

- The FHA forbids discrimination in all aspects of residential real-estate related transactions, including:
  - making loans to buy, build, repair, or improve a place to live;
  - selling, brokering, or appraising residential real estate; and
  - selling or renting a place to live
- The FHA also forbids discrimination based on **race, color, religion, sex, national origin, handicaps, or familial status**. That's defined as children under 18 living with a parent or legal guardian, pregnant women, and people securing custody of children under 18.

# Example Scenario

- Financial services company commissions development of AI to predict probability of a non-performing loan
- Data Scientist, who **did** know about the ECOA or FHA requirements, but did not know that some jurisdictions required exclusion of something *more*
  - *Their data had that “something more”*
- ML model was designed and trained with the data
- The ML model could **not** be used to determine whether that loan will be made, or the terms thereof

# Result...

- Company had to try to “excise” the output tainted with “something more”
  - Company wanted to keep its model
  - How could they excise the tainted data for that?
  - The city provided no guidance
    - Just the threat of enforcement...

**Privacy**

# Data are Used to Form a Contract

- Data used to determine what the customer (might) **want**
- Data leveraged to **cause** the customer to want something (fear and/or greed)
- Data used to **determine** what the customer would be willing to pay
- Data used to determine if the customer would be **willing** to contribute to the company as an unpaid employee

**Customer data is valuable  
and often obtained for free**

**... to the customer's  
detriment**

**Because the customer is  
powerless to prevent it**

**(That's why we set it up that way)**

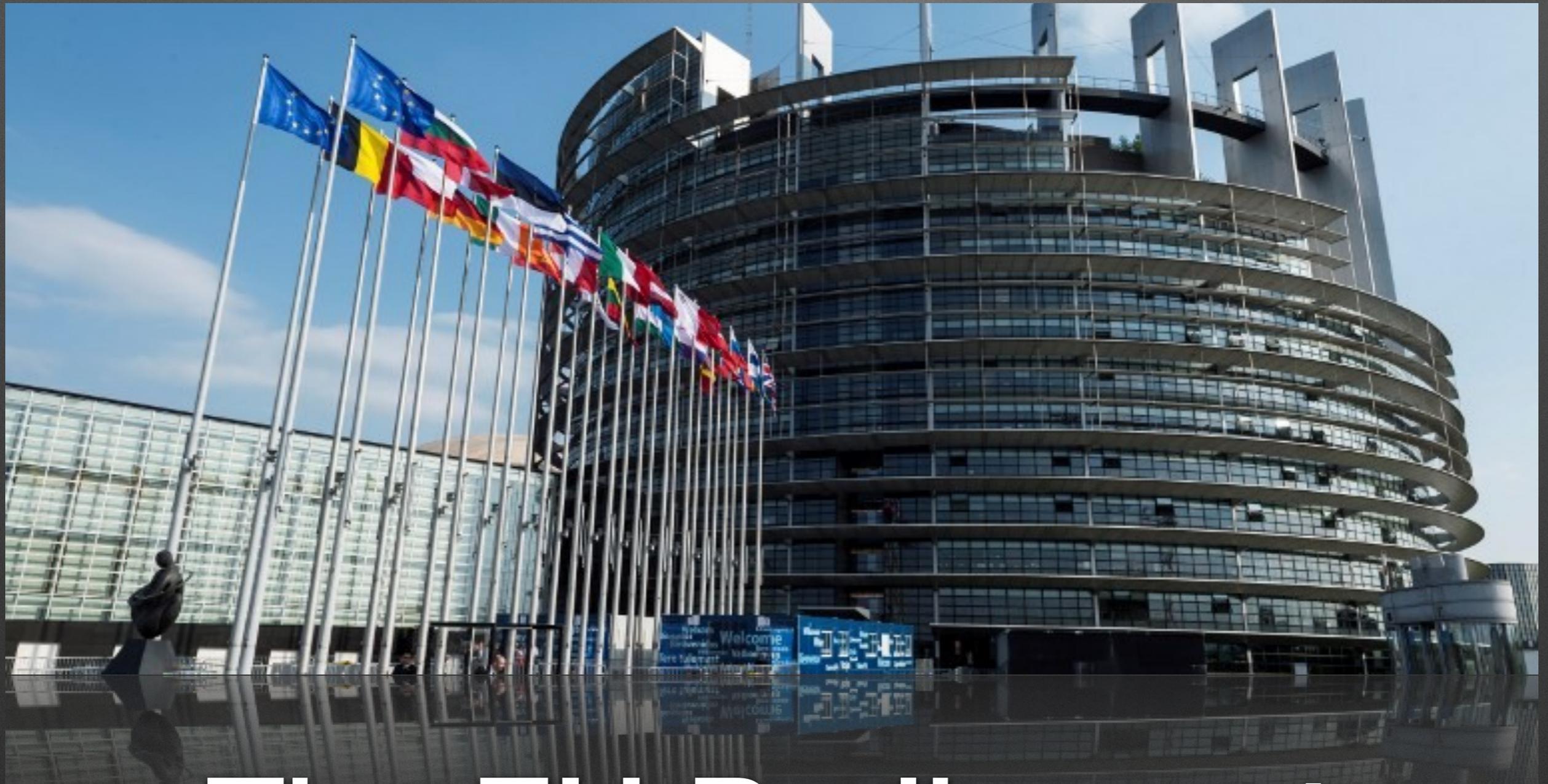
**Only government can  
correct that imbalance**

**GDPR, CCPA,  
State Breach/Notification  
HIPAA, GLBA, COPPA,  
CAN-SPAM, CFAA, ECPA,  
TCPA, FCRA, FACTA, etc.**

**<example>**

**GDPR**

# Who Promulgated GDPR?



**The EU Parliament**



# GDPR Overview

- Covers certain types of data...
- ... of people within the EU ...
- ... and gives those people certain rights ...
- ... that data scientists have to deal with.

**But I'm not in Europe!**

**Doesn't Matter!**

# GRPR Description

- Article 3 (territorial scope) of the GDPR
  - Key is *what* gets processed...
    - Such as data that can lead to (or affect the terms of) a potential commercial transaction; or
    - Data regarding *behavior* conducted within the EU
  - ... *regardless* of where the data is kept or processed

# GRPR Description

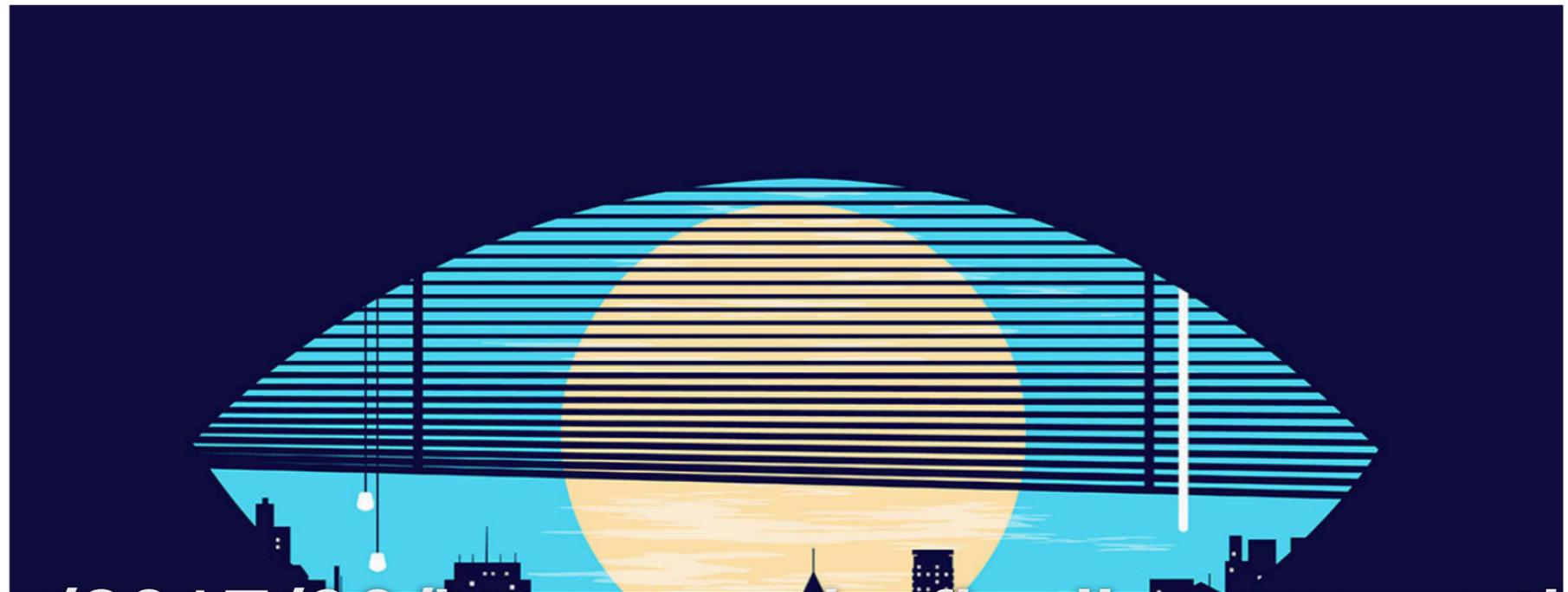
- Article 4 (what is covered) of the GDPR
  - ‘personal data’ means *any information* relating to an identified or identifiable natural person (‘data subject’); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person;

# Has Google Finally Proven That Online Ads Cause Offline Purchases?

by **Niraj Dawar**

JUNE 01, 2017

 SUMMARY  SAVE  SHARE  COMMENT  TEXT SIZE  PRINT **\$8.95** BUY COPIES



<https://hbr.org/2017/06/has-google-finally-proven-that-online-ads-cause-offline-purchases>

# GRPR Description

- Individuals have a right...
  - to have access to the data
  - to have the data be portable (e.g., for another party)
  - to have restrictions put on the use of the data
  - to be forgotten (erasure of the data)
- Penalties (20M€ fine or 4% of gross income)

# What you need to know (GDPR)

- Know which elements of your data are affected
- Know where all of the affected elements of your data are stored
- Know that data (in and from) *AI models* about covered people can be affected
- Know to whom you can provide the data, and how
- Know that affected elements of your data may have restrictions

# What you need to know (GDPR)

- Know that you may have to show where you got the data
- Know that affected data must be protected, regardless...
- Know that there is no “grandfather clause” to affected data
- Know that you might have to delete affected data (no refunds)

Providing free access to primary legal materials, developing legal research tools, and supporting academic research on legal corpora.

# Responding to GDPR “Right to Erasure” Requests

Recently, we received a GDPR request from our domain registrar asking that we remove a court document from our database on CourtListener. It appears that this is a growing problem for other legal publishers too, with techdirt doing a write up of the issue late last week:

GDPR Being Used To Try To Disappear Public US Court Docket <https://t.co/PIXcm0wl4n>

— techdirt (@techdirt) September 21, 2018

GDPR is a major development in the regulation of the Internet. It includes protections for individuals and a variety of regulations that apply to service providers like us. When GDPR went into effect, we were easily able to comply with its numerous privacy regulations because we were already being extremely conservative about who we shared data with and how much data we collected (see our privacy policy for details). For us, adopting compatible procedures with the GDPR just meant a few tweaks — no big deal.

Until last week that is, when we received a “Right to Erasure” request demanding that we remove a case from CourtListener. Now we have an EU regulation that’s at odds with our goal of gathering and sharing important legal information. What’s worse, if we complied with this request, we would be removing precedential information from CourtListener. Our policy is to never do that without a court order from a competent jurisdiction. In short, this take down request is at odds with our goals — and with the

## Links

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[RECAP](#)

## Social

[Free Law Project](#)

[CourtListener](#)

[RECAP](#)

**Oh, by the way...**

# The ePrivacy Directive

- Also by the EU Parliament
- ePrivacy Directive compliments the GDPR
- The ePrivacy Directive ensures the protection of fundamental rights and freedoms, in particular the respect for private life, *confidentiality of communications and the *protection* of personal data in the electronic communications sector.*

# Liability

# **Criminal Law & Civil Law**

# Some Basic Criminal Law

- *Actus Reus* (guilty act)
  - Requires an act or failure to act (when duty requires)
- *Mens rea* (guilty mind)
  - Requires knowledge or being informed

## TECH TRANSFORMERS

# Robot with \$100 bitcoin buys drugs, gets arrested

PUBLISHED TUE, APR 21 2015 6:32 AM EDT | UPDATED WED, APR 22 2015 5:09 AM EDT



**Arjun Kharpal**

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<https://www.cnbc.com/2015/04/21/robot-with-100-bitcoin-buys-drugs-gets-arrested.html>

# Criminal Models for AI

- Perpetrator-via-another
  - AI lacks *mens rea*, but user could be liable
- Natural-Probable-Consequence
  - AI did *actus reus* but could have had *mens rea*
    - AI might escape liability if there was no conspiracy
- Direct-Liability
  - AI attributed with both *actus reus* and *mens rea*

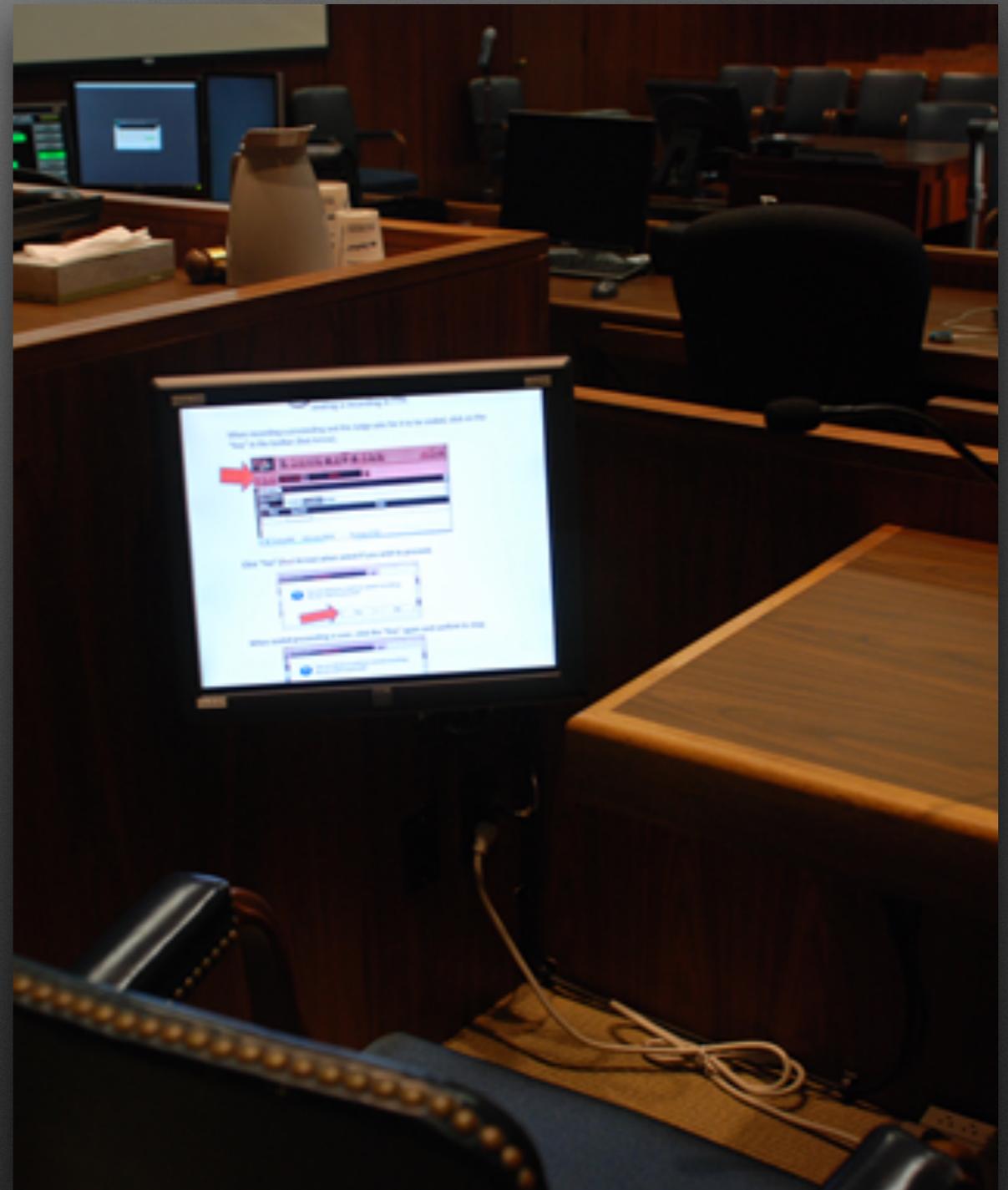
# Civil Models for AI

- Negligence
  - Duty/Breach/Causation/Damage
- Breach of Warranty / Breach of Contract
- Product Liability
  - Is AI a product or a service?
    - If “product” (warranty of merchantability)
    - If “service” (duty of care)

**Liability for AI (as an Agent)**  
will focus on **ownership,**  
**design, training** and/or  
**control** over the AI

# Defenses for AI

- Trojan horse defense
  - The AI was contaminated by someone else
  - This defense has worked in many cybercrime cases
- The design of the AI was bad
- The data used in the AI was bad
  - Shift liability to developers



# Future Possibilities

- Requirement of **Digital Identity** for each instance of an AI model
- License requirement for developers
  - May also require developer to certify their work
- Logging requirement (to preserve evidence of what the AI did)
- Require that the AI be knowable and explainable

Defense Advanced Research Projects Agency > Program Information

# Explainable Artificial Intelligence (XAI)

Dr. Matt Turek

## RESOURCES

[DARPA-BAA-16-53](#)

[DARPA-BAA-16-53: Proposers Day Slides](#)

[XAI Program Portfolio](#)

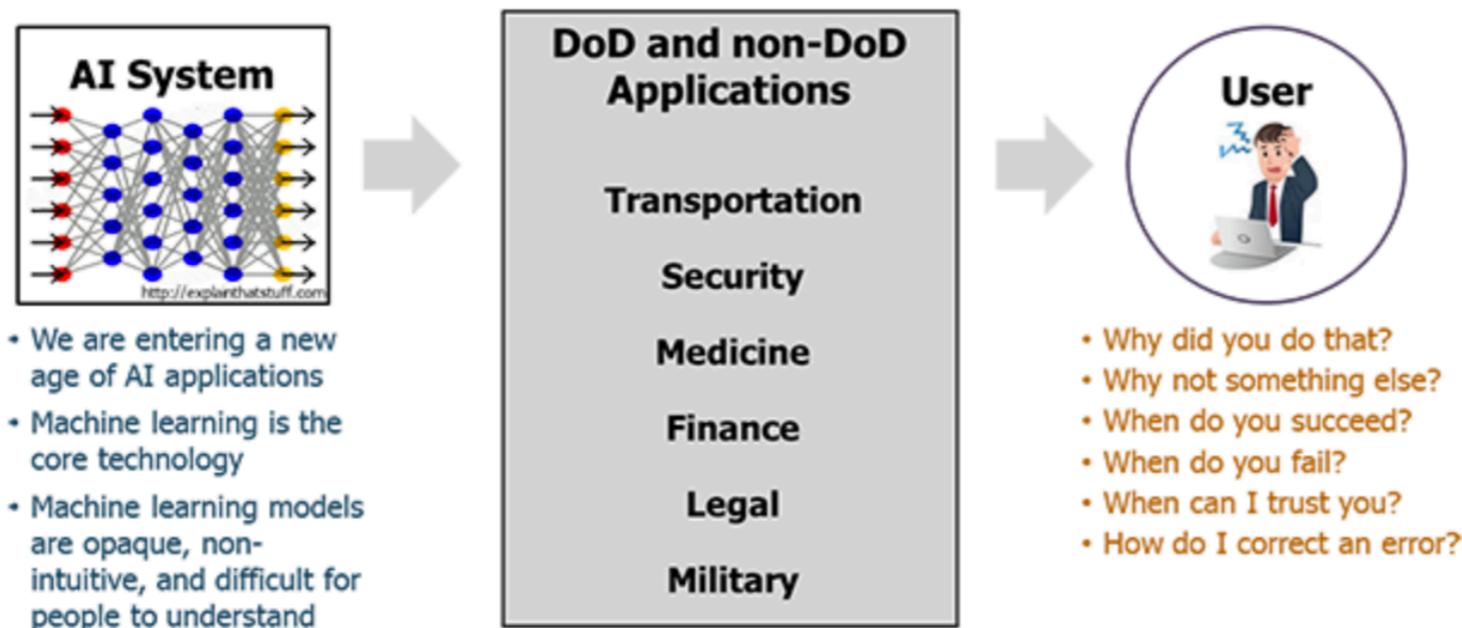


Figure 1. The Need for Explainable AI

Dramatic success in machine learning has led to a torrent of Artificial Intelligence (AI) applications. Continued advances promise to produce autonomous systems that will perceive, learn, decide, and act on their own. However, the effectiveness of these systems is limited by the machine's current inability to explain their decisions and actions to human users (Figure 1). The Department of Defense (DoD) is facing challenges that demand more intelligent, autonomous, and symbiotic

# Conclusions / Observations

# Questions Lawyers Will Ask

- Where did you get the data? (“Chain of custody”)
- Did you have permission/license to the data?
- What is in the data? (privacy-related)
- Who else saw the data? (Outside developers? **AWS?!!**)
- What was done to the data to develop the ML/AI?

# Questions Lawyers Will Ask

- Is there a mechanism for auditing the data & AI model for bias and/or privacy?
- Is there a mechanism to remove certain biases or data from the AI model?
- How does the AI work?
- What does the AI interface with?
- Who (and how) is the AI controlled or used?

# Don't Lose Sight of the Big Picture

- Data is having an effect on companies “bottom line”
- Data (and AI) have become lucrative
- Owners are very interested in lucrative
- AI and analytics needs data — *Lot's* of data
- Data can be used to throttle AI/analytics, and thus data can be *leveraged to extract a fee* for the Owners
- IP and privacy laws are just symptomatic of that leveraging
- More squabbles over data are forthcoming...

# Things to Consider

- Typical legal mechanisms affecting data (and thus AI):
  - **Contracts** — risk-shifting for data and AI
  - **Mergers & Acquisitions**
  - **Intellectual Property Laws** (civil and criminal penalties)
  - **Regulatory statutes/rules/ordinances** (for Privacy/anti-Bias)
  - **Civil and Criminal sanctions**
- Law will be used to *regulate* who gets what data and how
- Law will be used to *generate* artificial scarcity of data

**Forthcoming Data Squabbles  
Will Affect Your Job**

Opinion US politics

America's new aristocracy lives in an accountability-free zone

David Sirota

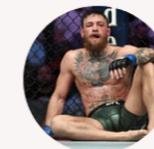
Accountability is for the little people, immunity is for the ruling class. If this ethos seems familiar, that is because it has preceded some of the darkest moments in human history

@davidsirota Fri 5 Oct 2018 02:00 EDT

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Live UFC 229: Khabib Nurmagomedov taps out Conor McGregor then brawls in crowd - as it happened



Limo crash leaves 20 people dead in upstate New York, authorities say

https://www.theguardian.com/commentisfree/2018/oct/05/americas-new-aristocracy-live-accountability-free-zone-david-sirota

**CAUTION**



**What Can You Do?**

Get competent Counsel  
**BEFORE** you make a mistake

# Intellectual Property Insurance: Everything You Need to Know

Intellectual property insurance protects inventors and companies if they're sued for infringement by another company. •

8 min read

## What Is Intellectual Property Insurance?

Intellectual property insurance protects inventors and companies if they're sued for infringement by another company. The most common type pays for legal fees and monetary damages if you're found guilty of [intellectual property infringement](#). Pursuit policy insurance is another form that helps pay expenses if you must sue someone for intellectual property infringement.

## What Is Intellectual Property?

Intellectual property is divided into two categories:

- **Industrial Property:** This includes patents, trademarks, and industrial design.
- **Copyright:** This covers artistic works. Examples include books, films, music, paintings, photos, and sculpture.

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# Product liability insurance

 REQUEST A QUOTE 

 FIND AN AGENT 

## What is product liability insurance for small businesses

Despite the hard work that small businesses put in to ensure they manufacture high-quality goods, there is still the chance that products could fail to work properly. For example, a children's apparel company could produce clothing that fits improperly and poses a suffocation hazard, or a food service business could bake pastries with an ingredient that triggers a customer's allergic reaction.

There is always the potential for defects that can result in bodily injury or property damage - serious risks neither your business nor customers can afford. That's why all businesses that sell products should have product liability coverage. Find out what product liability insurance is and how much your small business might need:

### How does product liability coverage work?



## Data Scientist Insurance

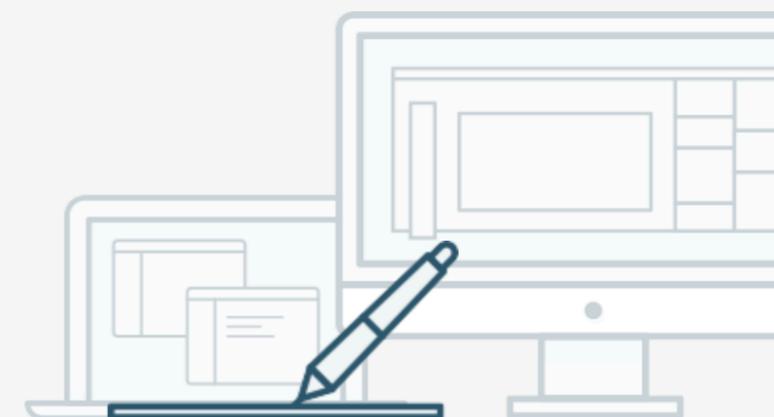
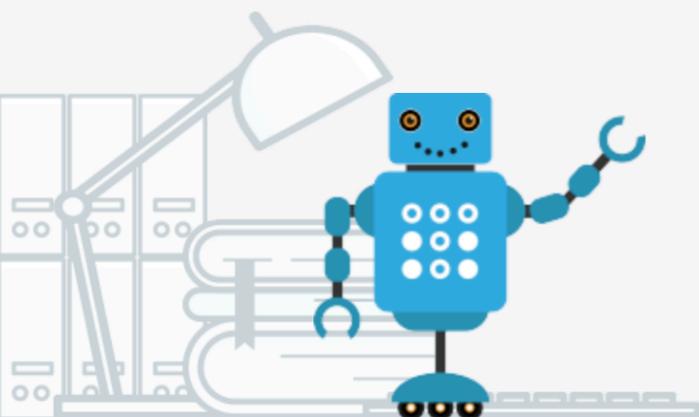
Coverage from as low as \$21

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## Small Business Insurance for Data Scientists

Data scientist was dubbed the [sexiest job of the 21st century](#) a few years ago by the Harvard Business Review, and it continues to live up to its rep. In fact, [Bloomberg reports](#) by 2018, the US could face a **50 to 60 percent gap** between demand and available analytic talent.

Interested in an IT data scientist career? You're probably wondering, "What are data scientist qualifications?" and "How do I become a data scientist?" For starters, you'll need:

- A deep understanding of applied mathematics and statistics.
- Knowledge of programming languages and applications, such as SQL, R, Python, and Tableau.
- The ability to interpret data and create reports.



Ronald Chichester

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**Questions?**

# Ronald Chichester

A lawyer, expert witness, and legal engineer with offices in Frisco and Nacogdoches County, Texas.



## Artificial Intelligence

Development and implementation of systems involving machine learning and other types of artificial intelligence, particularly for natural language processing, contract analysis, workflow automation.

Ownership and regulation of artificial intelligence for businesses.

Audits of artificial intelligence for mergers and acquisitions. Litigation involving systems that incorporate machine learning and artificial agents.



## Electronic Commerce

Drafting and negotiating contracts, smart contracts, service agreements, software licensing (both closed source and open source software), end user license agreements, website privacy policies, website terms of use policies, service agreements, service level agreements, and software development agreements.



## Cybersecurity & Privacy

Matters involving computer/network security such as cybersecurity measures, privacy policies, privacy regulations, security breach and notification requirements, incident response, privacy issues, privacy policies, information technology system audits, corporate espionage, identity theft, and computer crimes.



## Intellectual Property

Devising and implementing strategies for intellectual property, including patents, trademarks, copyrights, trade secrets and related antitrust issues. Particular expertise with patents involving computer engineering, computer science, and business methods. Expert witness on cases involving copyright infringement of computer source code.



## Legal Engineering

Automation of human/robotic workflow, particularly with respect to legal processes and practices. Development of algorithms and machine learning methods for robotics, data wrangling and visualization, system modeling, software development to integrate disparate software systems, document assembly, automated



## Blockchains

Integrating blockchains for business and commerce, smart contracts, distributed autonomous organizations (digital corporations), business governance. Smart legal contracts, automated business processes, as well as regulatory and antitrust issues related thereto.