ARTIFICIAL INTELLIGENCE:

Thinking About Law, Law Practice, and Legal Education

DUQUESNE UNIVERSITY

School of Law

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Reed Smith
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Delivering Collective Intelligence in Law

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COZEN O’CONNOR
Technology Skills for Lawyers

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Human Judgment

Tech Augmentation
Liberal Arts vs. Professional Education: Which is Better?
HBO’s Vice News features LawGeex in “The Future of Work”

The next Industrial Revolution is upon us, and scientists, entrepreneurs and policymakers are warning of an imminent paradigm shift in the future of work.

In partnership with the Council on Foreign Relations, VICE talks to industry leaders and laborers to learn how radical developments in automation and artificial intelligence are set to change the world of work as we know it.

Innovation and Technology in the Practice of Law

3 credits
Professor Randy Diamond
University of Missouri School of Law
Instructor biases

• Librarian perspective

• Practice readiness teaching

• Personal tech experience

• Innovation imperative / hype

• Risks and benefits framework

• Katz, *Quantitative Legal Prediction – or – How I Learned to Stop Worrying and Start Preparing for the Data Driven Future of the Legal Services Industry*

• Remus and Levy, *Can Robots Be Lawyers? Computers, Lawyers, and the Practice of Law*
Show me the money!

ABA Journal March 2019

Too Far Ahead of the Curve: Some Law Schools Offer Technology to Stand out From the Pack While Helping Students Find Jobs, But Some Question Whether it Works

Legal Evolution post April 2019

Susskind predicts the emergence of several new jobs for lawyers, including the legal knowledge engineer, the legal technologist, the legal hybrid, the legal process analyst, the legal project manager, the ODR practitioner, the legal management consultant, and the legal risk manager.
2034? Chances are you’ve got a particular combination of specialties

a forensic hacker tracking down violations of bilateral personal information treaties, for instance,

or a software engineer recoding a client-facing system for auditing compliance with carbon-trading laws.

New technologies disrupt existing industries. They always have, and they probably always will. The printing press put quite a few monks out of the manuscript hand-lettering business.

Railroads displaced much (though by no means all) of the barge and shipping industry.

They were in turn displaced by long-haul truck drivers, who are now at risk of being displaced by self-driving trucks.
The Internet and smart phones disrupted any number of industries, from camera makers to travel agents to watchmakers to sellers of keychain flashlights.

The sharing economy is disrupting many service industries, from taxis to hotels.

And new technologies like 3D printing, robotics, and artificial intelligence (AI) threaten to displace many different workers, including lawyers.
Course Description

As in other industries, the legal profession is undergoing substantial disruption.

Pressure to reduce client costs in the private sector and longstanding access to justice constraints in the public sector have fueled innovation through technology and redesign of traditional legal service models.
The course surveys topics at the intersection of law and technology such as artificial intelligence, Blockchain, cybersecurity, data privacy, electronic discovery, social media, and smart contracts;

law practice tech applications including practice management software and document automation; and evolving machine learning and data analytics tools.

Throughout the course, students will experience and evaluate practice tools that are essential for a lawyer’s technology competency.

No technical background required.
Duty of Technology Competence

MRPC 1.1 Comment 8

…a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology,

Online Learning Platforms

• Legal Technology Assessment LTA

• National Society for Legal Technology

• Legal Technology Core Competencies Certification Coalition
AI, Blockchain, Smart Contracts, etc.
Law Firm Recruiting Tries to Keep Up with Blockchain Boom


Blockchain’s applications extend far beyond heavily publicized cryptocurrencies such as Bitcoin and Ethereum, and include accounting, supply chain logistics, health care and advertising.

“A person coming out of law school can look for a firm known for this, a marquee name. They do the work for people who can train them. It is very complex work because it involves technology and technical knowledge.”
SEC recruiting Blockchain expertise

The job posting appears a notable one, marking a likely further step by the SEC toward clearing regulatory gray areas for the cryptocurrency industry in the U.S.
• Last June, the agency appointed its first-ever crypto czar, Valerie Szczepanik, as associate director of the Division of Corporation Finance and senior advisor for digital assets and innovation.

• Ms. Szczepanik joined the SEC in 1997 and most recently served as an Assistant Director in the Division of Enforcement’s Cyber Unit.

• She is the Head of the SEC’s Distributed Ledger Technology Working Group, Co-Head of its Dark Web Working Group, and a member of its FinTech Working Group.

• Ms. Szczepanik received her J.D. from Georgetown Law and her B.S. in Engineering from the University of Pennsylvania.
The Crypto Specialist provides expertise and coordinates the Division of Trading and Market's activities regarding crypto and digital asset securities

• Coordinating with TM staff to establish a comprehensive plan to address crypto and digital asset securities and engaging with other Divisions and Offices on such matters

• Serving as the TM's point of contact for domestic and international regulators, market participants, and the public
COIN

The software reviews documents in seconds, doing work that once required 360,000 hours of work each year by lawyers and loan officers, the story reports.

“BITCOIN”

We are exploring blockchain use cases and piloting solutions across business lines. We are active in the blockchain ecosystem: developing technology, investing in strategic partnerships, and participating in cross-industry consortia.
Liberal Arts vs. Professional Education: Which is Better?
https://blog.collegevine.com/liberal-arts-vs-professional-education-which-is-better/

While a liberal arts education includes instruction in a variety of topics and emphasizes the development of critical skills, a professional education seeks to educate students in one specific topic and prepare them directly for entrance into the professional world.
This [2015] article describes an emergent logic of accumulation in the networked sphere, ‘surveillance capitalism,’ and considers its implications for ‘information civilization.’


Google is to surveillance capitalism what General Motors was to managerial capitalism.
“In the future, if people still read books, they will view this as the classic study of how everything changed. *The Age of Surveillance Capitalism* is a masterpiece that stunningly reveals the essence of twenty-first-century society, and offers a dire warning about technology gone awry that we ignore at our peril…”

—Kevin Werbach, The Wharton School, University of Pennsylvania, and author of *The Blockchain and the New Architecture of Trust*
Companies and governments are gaining new powers to follow people across the internet and around the world, and even to peer into their genomes.

The benefits of such advances have been apparent for years; the costs — in anonymity, even autonomy — are now becoming clearer. The boundaries of privacy are in dispute, and its future is in doubt.
Do You Know What You’ve Given Up?

I Don’t Care. I Love My Phone.

How Capitalism Betrayed Privacy

It’s Time to Panic About Privacy

Feeling Safe in the Surveillance State

Think You’re Discreet Online? Think Again. Thanks to “data inference” technology, companies know more about you than you disclose.

Insurers Want to Know How Many Steps You Took Today

Tracking Phones, Google Is a Dragnet for the Police

Why You Can No Longer Get Lost in the Crowd – Once it was Easy to be Obscure Technology Has Ended That
Course Projects Ahead!

- AI policy and regulation
- Human v. AI Contract Review
- AI Memo/Brief Writing
- Blockchain Use Cases
- Data Mapping
- Digital Investigation and Forensics
- Implementing Carpenter
- Solo Small Firm Tech Plan
FTC Hearings
Panel 3: Consumer Protection Implications of Algorithms, Artificial Intelligence, and Predictive Analytics

• What features distinguish products or services that use algorithms, artificial intelligence, or predictive analytics? In which industries or business sectors are they most prevalent?

• What are the advantages and disadvantages for consumers and for businesses of utilizing products or services facilitated by algorithms, artificial intelligence, or predictive analytics?

• From a technical perspective, is it sometimes impossible to ascertain the basis for a result produced by these technologies? If so, what concerns does this raise?

• What criteria should determine when a “black box” system is acceptable, or when a result should be explainable?
The issue of algorithmic bias represents a crucial new world of civil rights concerns, one that is distinct in nature from the ones that preceded it.

Since we are in a world where the activities of private corporations, rather than the state, are raising concerns about privacy, due process, and discrimination, we must focus on the role of private corporations in addressing the issue.

Towards this end, I discuss a variety of tools to help eliminate the opacity of AI, including codes of conduct, impact statements, and whistleblower protection.
Comparing the Performance of Artificial Intelligence to Human Lawyers in the Review of Standard Business Contracts


LawGeex The Legal Tech Buyer’s Guide
AI Memo/Brief Writing

https://lawyerist.com/technology/online-legal-research-tools/casetext/

The Case Analysis Research Assistant, or CARA, is Casetext’s AI-backed legal research tool that helps you discover relevant cases and briefs based on complaints, briefs, and memos that you upload to CARA.
Legal Research


State Blockchain Use Examples

• Tennessee joins a handful of other states, including Wyoming, Nebraska, Florida, New York and Colorado, that have officially recognized blockchain technology as a means of verifying contracts.

• The County Auditors’ Association of Ohio (CAAO) exploring how blockchain tech can be implemented at the county level to “more effectively” transfer real-estate deeds between parties.

• Illinois Blockchain Initiative [https://illinoisblockchain.tech/](https://illinoisblockchain.tech/) Partners with Evernym to Launch Birth Registration Pilot

Even though lawyers have been slow to harness blockchain’s potential, the technology holds the promise to transform the practice of law into a form that will be unrecognizable to today’s lawyers.

By demonstrating how blockchain could make wills cheaper to prepare and less susceptible to tampering, this Article also points to multiple other uses for blockchain in the legal profession, including authentication of chain of ownership, record-keeping and drafting of all kinds.
Data Mapping

Craig Ball  http://www.craigball.com/Ball_E-Discovery_Workbook_Ver.%2019.0210.pdf

• http://www.craigball.com/index.html
Digital Investigations, Forensics, Authentications

• ESI Review Platforms - Logikcull [https://www.logikcull.com/](https://www.logikcull.com/)


• Custodian Directed Preservation of iPhone Content [http://www.craigball.com/mobile_preservation_method_FINAL.pdf](http://www.craigball.com/mobile_preservation_method_FINAL.pdf)

• Self-Authentication FRE 902(13) and (14)

Kerr, Implementing *Carpenter*


- The New Records of the Digital Age

- The Records Must Be Created Without Meaningful Voluntary Choice

- The Records Must Tend to Reveal “The Privacies of Life”

- Application to Messaging Services

- Application to Voice Calls

- Application to Websurfing

- Application to Ride-Sharing Records
April 24, 2019

Congress sends letter to Google for details on Sensorvault location tracking database

NYT report prompting letter:

• The police told the suspect they had data tracking his phone to the site where a man was shot nine months earlier.

• They had made the discovery after obtaining a search warrant that required Google to provide information on all devices it recorded near the killing,

• potentially capturing the whereabouts of anyone in the area.
• Ethics rules are laudable “because they’re trying to prevent harm from taking place” and at the same time have a “stifling effect” for innovation, William Henderson, Indiana University law professor, told the bar’s Board of Trustees.

• Modifying the ethics rules to facilitate greater collaboration across law and other disciplines will drive down costs, Henderson said in a report the bar commissioned.

• The report reviewed the legal services market landscape and new business models, including full-service and limited-service models by non-legal professionals such as accountants.
Legal Apps


• Sandefur, Legal Tech for Non Lawyers Report of the Survey of US Legal Technologies

• A2J Author

• Neota Logic

• Iron Tech Lawyer https://www.georgetowntech.org/irontechlawyer
Daedalus
https://www.amacad.org/daedalus/access-to-justice

• *Drawing on the enormous intellectual capacity of the American Academy of Arts and Sciences, whose members are among the world’s most prominent thinkers in the sciences, humanities, arts, and social sciences, as well as the professions and public life, each issue of *Dædalus* features multidisciplinary, authoritative essays centered on a theme or subject.*

• “Access to Justice” – the first open access issue of *Dædalus* – features twenty-four essays that examine the national crisis in civil legal services facing poor and low-income Americans”
Rostain, Techno-Optimism & Access to the Legal System

• For legal technologists, apps raise the prospect of putting the law in the hands of disadvantaged people who feel powerless to deal with their legal problems. These aspirations are heartening, but they rest on unrealistic assumptions about how people living in poverty deal with legal problems.

• To reach people from marginalized groups, access-to-justice technologies need to be integrated with human assistance.
Human Judgment

Tech Augmentation
Legal Innovation and Tech Lit

• LawSites
  https://www.lawsitesblog.com/

• Legal Tech News
  https://www.law.com/legaltechnews/

• Legal Evolution
  https://www.legalevolution.org/

• SSRN eJournals
  Artificial Intelligence - Law, Policy, & Ethics
  Cybersecurity, Data Privacy & eDiscovery Law & Policy
  Cyberspace Law
  Legal Information & Technology