

# Legal Technology & Informatics: Syllabus

## Think Outside The Bar

Notre Dame Law School - Spring Semester, 2015

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### **Synopsis:**

Legal technology is rapidly transforming both the practice and nature of law. This class seeks to explore both the current trends and the future possibilities of this transformation, as we begin to train the future generation of technology savvy lawyers, and technologists who understand the intricacies and potential of what the law could be. Legal informatics could be defined as a computational perspective of law: where does legal information reside, and how is it manipulated and transmitted? Note that there are no prerequisites for this class beyond an interest in the subject.

There are numerous examples of technologically driven legal transformation. Case law search has moved from hard copy to closed digital systems such as Westlaw and LexisNexis, and into free cloud-based systems such as Google Scholar and Ravel Law. More and more statutes are available online. Changes can be seen in e-discovery, privacy, the delivery of (online) legal services, and the budding legal technology startup community. As a result, questions arise as to the proper statutory and ethical framework for the legal profession and the boundaries between humans and machines in implementing legal functions. Beyond the current and near-term technologies, however, are core academic and philosophical questions that will have increasing import as machines gain in sophistication and capability.

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- [7. Marc Lauritsen](#)
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- [10. Ron Staudt](#)
- [11. Loic Coutelier](#)
- [12. Tim Hwang](#)
- [13. Ralph Baxter](#)
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# General Information

## Course Description

This course is a survey of the key issues in legal technology and informatics, presented by leaders in the relevant fields. We will cover a variety of broad issues - including how to pair technology with legal functions, legal technology startups, typical law practice management software, and the use of technology to increase access to justice.

## Goals and Objectives

The goal of the course is twofold: i) to familiarize students with theoretical issues in legal technology and ii) to prepare students to practically use, develop, and evaluate legal technology to enhance their own legal careers and the broader legal system.

At the end of the course, students should have knowledge of the topic area that they select for their final paper, and a general understanding of the key areas of the field.

## Prerequisites

There are no formal prerequisites to take this course. Please come with a strong interest in how technology transforms the law, and for any non-law-students, a willingness to explain concepts from your respective fields to students with different backgrounds.

## Course Materials

### Required Reading:

Christensen, Clayton. *The Innovator's Dilemma: The Revolutionary Book That Will Change the Way You Do Business*. HarperBusiness Reprint edition (October 4, 2011). ISBN-10: 0062060244

Susskind, Richard. *Tomorrow's Lawyers: An Introduction to Your Future*. Oxford University Press (March 1, 2013) ISBN-10: 019966806X

Additional required reading will be given for each class session.

### Optional Reading:

Optional reading will be provided in the materials for each session.

## Attendance Policy

Students are expected to attend all class sessions - the readings supplement the guest speakers and are not a replacement. If a student misses more than 2 classes throughout the course of the semester, they will be penalized one half letter grade for each additional absence. For instance, if a student misses 3 classes, and would have otherwise received an A- in the course, the student would receive a B+ for a final grade. A student with 4 absences would receive a B, and so on. Excused absences that comply with the Law School's Academic Affairs and Student Services Policies do not count as absences for the purpose of this policy.

## Grading

A student's grade for the course will be determined by two factors: i) a final paper, which will account for 80% of the final grade, and ii) participation, which will account for 20% of the final grade.

The final paper will be graded on the basis of clear and concise writing, originality, quality of citations, etc. Students must select a topic within 4 weeks of the start of class and get instructor approval. Paper outlines will be due within 8 weeks and also require instructor sign off. All deadlines, including for final papers, are final and not subject to extension.

For the participation component of the grade, both instructors will note the quality of each student's participation, and the assessment of both instructors will be used in calculating a score for each student's participation grade. Students are encouraged to prepare questions in advance of each class.

## Office Hours

Instructors will be available after each in-person class session, in addition to regularly scheduled virtual office hours. Please schedule an appointment with the instructors at the contact information listed below in order to ensure that your desired time is available.

Virtual Office Hours: Students may contact the professors to schedule a Skype or phone call to discuss the course at any time during the semester.

## Contact Information

Ron Dolin

Email: [Ron.A.Dolin@gmail.com](mailto:Ron.A.Dolin@gmail.com)

Skype: ron.a.dolin

Jason Boehmig

Email: [jason.boehmig@gmail.com](mailto:jason.boehmig@gmail.com)

Skype: jboehmig

## Work Assignments

- Before class 2, students choose one from the 12 remaining class topics, for being called on and for a paper topic.
- Before each class, all students must do the required reading and any assignments and have attempted to understand the “key concepts”.
- 20-30 page research paper to be completed before the final paper deadline at the end of the course.
- Students will be presenting their paper topics at the last class session.

# Class Sessions

## Class 1 - Transformations

**Topics:** Legal Landscape: Transformations, Scope, Profession, “Big Law”

**Speaker:** Andy Jurczyk -- CIO of Seyfarth Shaw

### Class Outline:

1. Introductions and class structure.
2. What do we mean by “technology” and “informatics”, and what is the difference between general and legal technology and informatics?
3. Is the nature of law changing; what is the role of technology in law?
4. Should legal technology be taught in law school? What other aspects of law are commonly taught in addition to substantive and procedural aspects of law (e.g. practice management, economics)?
5. Scope - defining terms: legal technology vs. legal informatics. Is “voting” part of the law curriculum, legal technology?
6. Transformation in the profession - How is the legal profession changing: old and new career paths? How is technology affecting this?
7. What does legal technology look like from the perspective of big law?
8. From an informatics perspective, what information tends to flow into and out of a law firm? As a result, what type of technology would we imagine to be important to a law firm? How could this information flow be tweaked, transmitted safely over the cloud, made scaleable or (semi-)automated, etc.? (We’ll see an example of seeking appropriate technology to fulfill various legal functions when we examine e-discovery.)
9. How efficient is Big Law? How do they measure quality? efficiency? productivity? value? How are you, as a student, graded on a legal brief? How is a practicing lawyer “graded”?

### Key Concepts:

informatics, legal informatics, technology, billable hour, project management, unbundled services, outsourcing vs. offshoring, law firm business model, law practice management, e-discovery, manual review, law firm pyramid model, cash cow, six sigma, lean manufacturing

### Reading:

Required

- Richard Susskind - [Tomorrow's Lawyers](#)
- Legal Transformation 2020 (Summary):  
<https://www.legaltransformation.com/studysummary.asp>

- State of the Legal Industry Survey (2009, LexisNexis):  
[http://www.lexisnexis.com/document/State\\_of\\_the\\_Legal\\_Industry\\_Survey\\_Findings.pdf](http://www.lexisnexis.com/document/State_of_the_Legal_Industry_Survey_Findings.pdf)
- Informatics  
Wikipedia: <http://en.wikipedia.org/wiki/Informatics>
- Legal Informatics  
Wikipedia: [http://en.wikipedia.org/wiki/Legal\\_informatics](http://en.wikipedia.org/wiki/Legal_informatics)
- Technology  
Definition:
  1. the science or study of the practical or industrial arts, applied sciences, etc.
  2. applied science.
  3. a method, process, etc. for handling a specific technical problem.
  4. the system by which a society provides its members with those things needed or desired.
 Wikipedia: <http://en.wikipedia.org/wiki/Technology>

#### Optional

- <http://www.legaltransformation.com>
- <http://legalinformatics.wordpress.com>
- <http://abajournal.com/topic/legal+technology>
- <http://amazon.com/End-Lawyers-Rethinking-nature-services/dp/0199593612>
- [http://en.wikipedia.org/wiki/Six\\_Sigma](http://en.wikipedia.org/wiki/Six_Sigma)
- [http://en.wikipedia.org/wiki/Lean\\_manufacturing](http://en.wikipedia.org/wiki/Lean_manufacturing)
- (See [course reader](#))

#### Tasks:

Review course syllabus (and optionally the [course reader](#)). Select a single class for both being called on and a topic area for your course paper.

## **Class 2 - Innovator's Dilemma**

**Topics:** What does Innovator's Dilemma have to say about legal services?

**Speaker:** TBD

### **Class Outline:**

1. What are the predominant values found within various components of the mainstream legal system (e.g. law firms, courts, law schools, bars, etc.)?
2. What are the current metrics used by law firms? courts? law schools?
3. What are the predominant values found in companies such as Riverview? LegalZoom? (compared even to, say, Thomson Reuters or LexisNexis)
4. What types of metrics could exist? financial, quality, efficiency, satisfaction, etc.
5. Why do Fortune100 companies use Big Law? What are the implications of imputed conflicts in terms of
  - a. law firm growth
  - b. distribution of large corporate clients among the AmLaw 100
6. Is there such a thing as a law firm "distribution model"? What are its profit margins?
7. Why would people use Google Docs to create documents vs. Microsoft Word? What about commodity vs. custom in general? For legal services?
8. How good is the quality of documents produced by LegalZoom? Who should decide the definition of quality for this, and on whose behalf?
9. If LegalZoom starts with commodity work at low cost, will it move "up market"? How is "up market" defined for various legal services?
10. What is the impact of functional vs. protectionist applications of UPL on the theory of Innovator's Dilemma? What is the potential impact on LegalZoom? Who's winning the lawsuits?
11. If technology stands to increase both the quality and efficiency (i.e. the value) of legal services, what does Innovator's Dilemma say about the timeliness or inevitability of disruption?
12. Which metrics and values are required to overcome the notion of "reputation"? What would be the impact on the legal system of Big Law adopting a model of competition in which reputation was replaced by value as defined as quality over cost?
13. What is the argument against "adaptive" innovation? What are the personal incentives of the decision makers compared to the long-term organizational

objectives?

**Key Concepts:**

innovation, sustaining vs. disruptive innovation, legal products and services, legal distribution channels, law firm services, legal practice management software providers, organizational decision making, individual incentive structures, AmLaw 100, productivity (legal vs. all other businesses), metrics

**Reading:**

Required

- Christensen, [\*Innovator's Dilemma\*](#)
- William Henderson, [\*From Big Law to Lean Law\*](#)

## **Class 3 - Delivery and Consumer Law**

### **Topics: Internet and the Cloud: Technological Delivery of Legal Services**

**Speaker: Eddie Hartman -- LegalZoom**

#### **Class Outline:**

1. What is the current and potential impact of the internet on the practice of law?
2. What does *access* mean (cost, quality, speed, automation)? In particular, what does access to law/justice mean?
3. What changes if/when most/all people have access to legal information/services?
4. What happens when legislation (pending or current), regulation, and/or judicial interpretation (legal decisions, etc.) can be easily monitored by 1) the public, 2) special interests, and 3) large and small businesses alike?
5. Where are the inefficiencies and the latent markets within legal services? Which of these are ripe for disruption? Why? By whom?
6. From an informatics perspective, what types of information exchange are facilitated by the cloud? How does this capability facilitate potential legal function?

#### **Key Concepts:**

legal services, commoditization, automation, "The Cloud", scalability, UPL (unauthorized practice of law), attorney fee splitting, legal information vs. legal advice, latent markets, attorney-client privilege.

#### **Reading:**

Required:

- Chris Johnson - Leveraging Technology to Deliver Legal Services:  
<http://jolt.law.harvard.edu/articles/pdf/v23/23HarvJLTech259.pdf>

#### **Example Problems:**

Digital courtrooms & nationally distributed jury pools:

<http://slideshare.net/doryreiling/innovative-court-technology-reiling-june-2012-13876547>

## **Class 4 - Corporate**

### **Topics: Corporate Legal Technology**

**Speaker: Julian Tsisin -- Google Legal Tech**

#### **Class Outline:**

1. What are the impediments to progress in terms of uptake of legal technology by in-house legal departments?
2. What kinds of data are being made available, or would be required, by corporations to assist with legal risk analysis?
3. What are the major legal costs for corporate legal departments?
4. Where is the low hanging fruit? (Cisco: NDA; Google: e-signature; etc.)
5. What types of compliance and filings are common, and how amenable are such things to automation?
6. What does a corporate contract portfolio look like? patent portfolio? How does staff look up or understand their IP?
7. How are corporate clients pushing law firms to move forward with legal technology?
8. What is the interplay between e-discovery and institutional memory (e.g. data retention policy)?
9. What kind of tech support do in-house legal departments get in terms of engineering support for new tools (beyond general IT support)?
10. From a legal informatics perspective, what types of legal data and processing are likely to occur within a corporate framework? This includes both internal (company) and external (user, vendor, etc.) data.

#### **Key Concepts:**

NDA, legal risk analysis, prediction (see Session 8), ROI, compliance, SEC filings, e-discovery, data retention policy, institutional memory, knowledge management

#### **Reading:**

Required:

- The Cisco Way: This Internet Giant's Outside Counsel Must Stay Tech-Savvy to Survive  
[http://www.abajournal.com/magazine/article/the\\_cisco\\_way/](http://www.abajournal.com/magazine/article/the_cisco_way/)
- Inside Counsel's "IC10": Law Departments of the Future  
<http://www.insidecounsel.com/2014/11/21/the-2014-ic10-the-law-departments-of-the-future>
- Legal OnRamp  
[http://en.wikipedia.org/wiki/Legal\\_OnRamp](http://en.wikipedia.org/wiki/Legal_OnRamp)
- Minnesota State Archives Legal Risk Analysis

<http://www.mnhs.org/preserve/records/tis/Legalriskoptions.html>  
[www.mnhs.org/preserve/records/tis/docs\\_pdfs/Legalrisk.pdf](http://www.mnhs.org/preserve/records/tis/docs_pdfs/Legalrisk.pdf)

## Class 5 - Search

### Topics: Legal Search: “Information Intermediation” -- A Technology Solution for Multiple Problems

Speaker: Daniel Lewis, Ravel Law

#### Class Outline:

1. How might one specify an information need, say for the following: a library book, an aerial photograph, a consumer product, a (legal) service provider, a potential date, music or video, a patent, a court opinion, a statute and/or regulation, an EU Directive?
2. What are common ways of cutting information (e.g. date, topic, geographical region, cost, author/custodian, etc.)? How might these be combined into a single ranked list of results?
3. What are common text-processing search techniques?
4. What are the pros and cons of (hierarchical) classification?
5. How might one evaluate (legal) search results?

#### Key Concepts:

Information/text retrieval, search index, term vector space, latent semantic analysis, tf/idf, stop words, synonym expansion, metadata, Dublin Core, search query, ambiguity, fielded search, filtering vs. ranking, satisficing, hierarchical classification scheme, semi-automated classification, clustering, heterogeneous data, multifaceted search, precision, recall, predictive coding, sampling

#### Reading:

Required:

- **General:** [http://en.wikipedia.org/wiki/Vector\\_space\\_model](http://en.wikipedia.org/wiki/Vector_space_model)
- **Multifaceted Search:** <http://www.okcupid.com/help/match-percentages>

Optional:

- (See [course reader](#))

#### Tasks:

Prepare two useful legal searches that you can't do online, with at least one oriented toward Google Scholar (see [http://scholar.google.com/advanced\\_scholar\\_search](http://scholar.google.com/advanced_scholar_search)).

## **Class 6 - E-discovery**

**Topics: E-discovery - Problems Requiring Multiple Technological Solutions**

**Speaker: AJ Shankar, Jon Kerry-Tyerman -- EverLaw**

### **Class Outline:**

1. What is discovery? e-discovery?
2. What processes are involved in end-to-end e-discovery?
3. What are some of the legal challenges? technical challenges?
4. What does “proportionality” mean and how is it relevant to e-discovery?
5. How many documents is too few? too many? juuuust right?
6. What is the relationship between discovery and institutional memory (Session 4)?

### **Key Concepts:**

e-discovery, EDRM, holds, production, de-duplication, privileged, responsive, document tagging, document review

### **Reading:**

Required:

- <http://www.edrm.net/frameworks>

Optional:

- (See [course reader](#))

## Class 7 - Automation, Standards, AI, Expert Systems

### Topics: Automation, Standards, AI, Expert Systems

Speaker: Marc Lauritsen -- Capstone Practice Systems, Legal Systematics, and All About Choice

#### Class Outline:

1. Which legal functions are most amenable to automation? Why?
2. What are the trade-offs of automating (legal) human activities?
3. What are the advantages and disadvantages of semi-automation?
4. What types of information are most amenable to standardization and componentization (data, API's)? What type of API might you want around, say, copyrights (see, e.g. [SIPX](#))?
5. What are the drivers of new technology and informatics in law?
6. What are the goals of informatics in law?
7. What are the relevant differences and similarities between law and, say, medicine (e.g. physical, natural vs. man-made, market-size, etc.)?

#### Key Concepts:

automation, semi-automation, standard, ADR, API, componentization, certification, controlled vocabulary, ambiguity, biomedical technology/informatics

#### Reading:

Required:

- The Economist - Morals and the Machine  
<http://www.economist.com/node/21556234>
- Automation: Will Robots Steal Your [legal] Job?  
[http://www.slate.com/articles/technology/robot\\_invasion/2011/09/will\\_robots\\_steal\\_your\\_job\\_5.html](http://www.slate.com/articles/technology/robot_invasion/2011/09/will_robots_steal_your_job_5.html)
- Automation: Will Robots Steal Your [medical] Job?  
[http://www.slate.com/articles/technology/robot\\_invasion/2011/09/will\\_robots\\_steal\\_your\\_job\\_3.html](http://www.slate.com/articles/technology/robot_invasion/2011/09/will_robots_steal_your_job_3.html)
- Semi-automated Contract Formation and Standardization:
  - [Marc Lauritsen's MOOC session](#)
  - <http://tdlp.classcaster.net/2012/03/16/tdlp-class-6-kingsley-martin-contract-standardization/>
- [http://www.law.harvard.edu/programs/plp/pdf/003-03358\\_03358-ch0002.pdf](http://www.law.harvard.edu/programs/plp/pdf/003-03358_03358-ch0002.pdf)
- Triage and Expert Systems in Legal Aid - <https://www.youtube.com/watch?v=mFU-f4qJ47w>
- [http://members.calbar.ca.gov/sections/lpmt/etbl/v34-n2\\_2013\\_april/03\\_a-time-to-tool-up-1.html](http://members.calbar.ca.gov/sections/lpmt/etbl/v34-n2_2013_april/03_a-time-to-tool-up-1.html)  
(copy required)

## Class 8 - Analysis, Visualization, and Prediction

### Topics: Computational Analysis, Visualization, Prediction of Legal Issues and Outcomes

Speaker: Dan Katz -- Michigan State Law School

#### Class Outline:

1. Which types of (legal) issues are amenable to a computational perspective? Not just the obvious (e.g. formulas, economics, quantifiable data, damages awards), but also...
2. What questions might you want to ask but can't answer due to poorly structured data?
3. How might visualization assist in understanding (legal) data?
  - a. Consider spacing (linear, 2D and 3D): why do we indent nested code segments, contract clauses, etc.?
  - b. Consider what visualization can do with portraying large amounts of information.
  - c. Consider what relations between pieces of information can be represented through color, arrows, icons etc.
4. What assumptions go into (legal) prediction? What repeatable behaviours are visible? What has to happen in law, when predicting legal risk?
  - a. When is it not enough to say you're fitting the predicted pattern? how might edge cases push the boundaries of prediction and raise red flags? [case of the 8'11" man]
  - b. How important is uncertainty around prior events, especially with sparse data sets?
5. Are there aspects of legal problems that differentiate them from non-legal problems from an analytical or visualization perspective (e.g. Consider human genome as compared to statutes)?

#### Key Concepts:

visualization, chart junk, computational analysis, prediction

#### Reading:

Required:

- <http://plato.stanford.edu/entries/popper/#SciKnoHisPre>
- [Quantitative Legal Prediction](#), by Dan Katz (draft copy via SSRN)
- [Predictive Policing](#)

Optional:

- Edward Tufte (e.g. Visual Display...): <http://www.edwardtufte.com/tufte/>

- [Lex Machina Arms Corporate Leaders and Patent Attorneys with Predictive Analytics](#)
- [Big Data Meets BigLaw: Will Algorithms Be Able to Predict Trial Outcomes?](#)
- [Android at Law: Will Robots Steal Your Job?](#)
- [Armies of Expensive Lawyers, Replaced by Cheaper Software](#)
- (See [course reader](#))

**Example Problems:**

Computational Analysis; Visualization

## **Class 9 - Practice Management Software, Gamification**

**Topics: What software is (actually) used to run law firms, courts, in-house, etc.?**

**Speaker: Stephanie Kimbro -- Stanford Law**

### **Class Outline:**

1. What types of practice management software might you expect to see in a law firm (solo vs. large), court, in-house legal department?
2. How does legal practice management software compare with medical in terms of record management, decision support for diagnosis and treatment, etc.?
3. How do law firms and their clients share information now compared to 20 years ago? What might this look like 20 years from now?
4. Which activities cost the most, and how much of that derives from tasks amenable to increased automation?
5. How do games and gamification techniques impact and incentivize behavior? What types of behavior might you want to incentivize in the legal system, why, and how?

### **Key Concepts:**

practice management, client conflicts, time management, project management, gamification

### **Reading:**

Required:

- [http://en.wikipedia.org/wiki/Law\\_practice\\_management](http://en.wikipedia.org/wiki/Law_practice_management)

Optional:

- [http://www.americanbar.org/publications/law\\_practice\\_magazine/2014/september-october.html](http://www.americanbar.org/publications/law_practice_magazine/2014/september-october.html)

## Class 10 - Access

**Topics: Access to Justice; The role of government in the encouragement and utilization of legal technology; legal education and certification**

**Speaker: Ron Staudt -- Kent Law**

### Class Outline:

1. What, if any, is the difference between access to law and access to justice?
2. Does/could technology increase access to law? If so, how? If not, why not?
3. What do various government agencies say is their responsibility to provide for access to law?
4. What is CA bar's notion of "legal technology"? Is it limited to "practice management"?
5. How can intelligent tools help non-lawyers get legal work done, or enable lawyers to help non-lawyers solve legal problems more easily and/or cheaply?
6. What aspects of personal (e.g. non-corporate) legal work can machines competently handle?
7. Do the ABA model rules of Professional Responsibility address legal technology at all? What about the CA bar?
8. What types of legal technology should be taught at law school or be made available via MCLE? Who regulates law school accreditation and MCLE credits? What constraints exist that promote or limit such training?
9. Can legal technology assist with legal education? Are there unique educational requirements for law (e.g. clinic work)?

### Key Concepts:

[Legal Services Corporation \(LSC\)](#), Calbar's [Center on Access to Justice](#), Calbar's [LPMT](#), MCLE, ABA Model Rules of PR, lawyering, AI & Law, "working smarter", law school accreditation, Apps 4 Justice

### Reading:

Required:

- [Cyberclinics: Law Schools, Technology and Justice](#), by Ron Staudt
- [Lawyering in an Age of Intelligent Machines](#), by Marc Lauritsen
- Belgium Constitution, Art. 23:  
[http://en.wikipedia.org/wiki/Constitution\\_of\\_Belgium#The\\_Belgians\\_and\\_their\\_rights](http://en.wikipedia.org/wiki/Constitution_of_Belgium#The_Belgians_and_their_rights)
- ABA Adopts Ethics Policy on Lawyers' Use of Technology  
[http://www.abajournal.com/news/article/lawyers\\_have\\_duty\\_to\\_stay\\_current\\_on\\_technologies\\_risks\\_and\\_benefits/](http://www.abajournal.com/news/article/lawyers_have_duty_to_stay_current_on_technologies_risks_and_benefits/)

Optional:

- Edwina Rissland “Artificial Intelligence and Law: Stepping Stones to a Model of Legal Reasoning.” Yale Law Journal. Vol. 99, No. 8, pp. 1957-1982, June 1990  
<http://heinonline.org/HOL/LandingPage?collection=journals&handle=hein.journals/ylr99&div=73&id=&page=>
- Taiwo Oriola, The Use of Legal Software by Non-lawyers and the Perils of Unauthorised Practice of Law Charges in the United States  
<http://eprints.ulster.ac.uk/16416/>
- Belgium: [http://ec.europa.eu/civiljustice/legal\\_aid/legal\\_aid\\_bel\\_en.htm](http://ec.europa.eu/civiljustice/legal_aid/legal_aid_bel_en.htm)
- UK Legal Aid Eligibility:  
[http://www.legalservices.gov.uk/civil/civil\\_legal\\_aid\\_eligibility.asp](http://www.legalservices.gov.uk/civil/civil_legal_aid_eligibility.asp)
- U.S. State Statute availability
  - <http://sunlightfoundation.com/blog/2012/10/02/survey-how-many-states-publish-rulesand-regulations-online/>
  - <http://www.aallnet.org/Documents/Government-Relations/2011-2012-Preliminary-Analysis-of-AALLs-State-Legal-Inventories.pdf>
- U.S. Federal Legislation and Related: <http://beta.congress.gov/>
- (See [course reader](#))

**Tasks:**

Explore [Illinois Legal Aid Online](#). Locate the module that produces a petition to waive court fees in Cook County Circuit Court. Complete the interview, as if you were a pro se litigant, and generate the form needed.

## **Class 11 - Online Dispute Resolution and The Legal Tech Framework**

**Topics: Online Dispute Resolution: e-commerce, courts, dispute prevention; legal technology framework**

**Speaker: Loic Coutelier -- Modria**

### **Class Outline:**

1. How many disputes does e-bay handle each year? How many require human intervention? Which region(s)' laws apply? What is the average dispute amount?
2. How much would it cost to handle e-commerce cases in (e.g. small claims) court?
3. What percentage of online products or services disputes lead to litigation?
4. How does one evaluate a dispute resolution system?
5. How fair is automated DR?
6. What types of trade-offs between quality and efficiency are reasonable? What actually happens?
7. How can we reduce the number of conflicts within e-commerce systems? What might this say about reducing conflicts within the legal system?

### **Key Concepts:**

online dispute resolution (ODR); alternative dispute resolution (ADR); 3rd, 4th, 5th party; process fairness; outcome fairness; e-commerce; automated negotiation;

### **Reading:**

Required:

- [http://en.wikipedia.org/wiki/Online\\_dispute\\_resolution](http://en.wikipedia.org/wiki/Online_dispute_resolution)
- <http://www.fairoutcomes.com/>

## **Class 12 - Legal Tech Startups**

**Topics: Sample of Recent Legal Tech Startups, Areas of Law, Types of Technology**

**Speaker: Tim Hwang -- Robot, Robot, & Hwang**

### **Class Outline:**

To date, this class has surveyed many arenas of innovative activity within the legal industry and the law more generally. This session will tie these threads together to think about how the profession should architect an ecosystem which will support and strengthen these innovations going ahead.

1. What are some active legal tech startups?
2. Which areas of law are they targeting? Why?
3. What are the legal requirements of the relevant legal functions?
4. Describe the information and processing flow through these startups.
5. What are the barriers to adoption? Competition? Distribution channels?
6. As a policy matter, what are the classes of innovation that should be supported in the legal industry?
7. What are the different levers of control that would allow us to influence this system?
8. What limitations on using these levers are “hard coded” into our structure of regulations around the profession?
9. Where are dominant models of venture financing effective in helping us bring about change? Where is it limited?
10. How relevant is the social norms of the profession? To what extent can changing economics bring about change in these norms?
11. What are the alternative structures of legal work and legal services that would emerge by tweaking these levers of control?
12. How might lessons from other industries provide us with a blueprint on how to push the legal industry ahead?
13. How might legitimate (and subversive) means interact to bring about change?

### **Key Concepts:**

Startups, legal technology startups, barriers to adoption, barriers to entry, distribution channels, venture capital, lead users, unauthorized practice of law, intellectual property in legal information, law factories, research parks, incubators, Homebrew Computer Club, Napster, Bestlaw, programmers.

**Reading:**

Required:

- Eric von Hippel - “Development of Products by Lead Users”
  - <http://web.mit.edu/evhippel/www/books/DI/Chapter2.pdf>
- Tim Hwang - “The Laws of (Legal) Robotics”
  - <http://www.robotandhwang.com/wp-content/uploads/2013/06/The-Laws-of-Legal-Robotics.pdf>
- ABA Journal - “These Venture Capitalists Skip Law Firms for Legal Services”
  - [http://www.abajournal.com/magazine/article/these\\_venture\\_capitalists\\_skip\\_law\\_firms\\_for\\_legal\\_services\\_startups/](http://www.abajournal.com/magazine/article/these_venture_capitalists_skip_law_firms_for_legal_services_startups/)
- Larry Ribstein and Bruce Kobayashi - “Law’s Information Revolution”
  - [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=173851](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=173851)
- Joe Mornin, “Bestlaw, a Robot for Legal Research”
  - <http://www.mornin.org/blog/bestlaw-robot-legal-research/>

## Class 13 - The Future

**Topics: The Future of Legal Technology: where are we heading?**

**Speaker: Ralph Baxter -- Orrick, Thomson Reuters**

### Class Outline:

1. What are the various potential interactions between people and machines in the future, and what would the inevitable trade-offs be?
2. What should the law be ideally? What is fair?
3. What aspects of the legal system are inherently human?
4. Are law firms of some form necessary for the legal system?
5. What is the role of (computer) code in controlling human behavior?

### Key Concepts:

legal evolution, HCI, free will, determinism, empathy, selective enforcement, prosecutorial discretion, justifications for punishment, criminal sentencing guidelines, exigent circumstances, law vs. equity, retribution, responsibility, culpability, negligence, intent, recklessness, willful blindness, rule of recognition (paradox?), institutionalized norms, “code is law”, designing law

### Reading:

Required:

- A neurological foundation for freedom (extended abstract only):  
<http://stlr.stanford.edu/2012/02/a-neurological-foundation-for-freedom/>
- The implications of free will on tax law: “Luck, Wealth, and Implications for Policy”, Richard Posner  
<http://www.becker-posner-blog.com/2012/10/luck-wealth-and-implications-for-policy-posner.html>
- Legal Evolution:  
<http://www.jstor.org/discover/10.2307/2775207?uid=2129&uid=2&uid=70&uid=4&sid=21101203681797>

Optional:

(See [course reader](#))

Highly recommended: Free Will Hunting

<http://www.amazon.com/Free-Will-Hunting-HD/dp/B008V6YI2G>

**Example Problems:**

- Regulating moving violations (see [course reader](#))
- AI and the Law (see [course reader](#) -- three questions)

## **Class 14 - Student Presentations**

**Topics: Students Presenting Their Papers**

**Speakers: Students**

**Class Outline: TBD**

# Guest Speaker Bios

## 1. Andy Jurczyk

## 2. (none)

## 3. Eddie Hartman

## 4. Julian Tsisin

## 5. Daniel Lewis

**Daniel Lewis** is the CEO and co-founder of Ravel Law. Daniel earned his JD from Stanford Law, where he developed the initial prototype for Ravel working between the law school, the computer science department, and the d.school, Stanford's multi-disciplinary design institute. At Stanford, he also served as co-executive director of the Afghanistan Legal Education Project and consulted with Passport Capital on energy policy. Prior to Ravel, Daniel worked as a national energy and transportation policy analyst at the Bipartisan Policy Center in Washington, DC. His past experience includes time with the Natural Resources Defense Council and United States Senator Barbara Boxer. Daniel has a BA from Johns Hopkins.

## 6. AJ Shankar, Jon Kerry-Tyerman

**AJ Shankar** is the founder and CEO of Everlaw, where he leads a team that is building the world's most advanced litigation platform—beginning with ediscovery—by making the most cutting-edge technology accessible with elegant and intuitive design. Prior to Everlaw, AJ co-founded Modista, a website that uses computer vision algorithms and a novel user interface to enable consumers to browse for apparel intuitively. The company won First Place in the UC Berkeley Business Plan Competition and was later acquired. AJ has also worked at IBM Research and as part of IBM's Advanced Internet Technologies Group. AJ has a Ph.D. in Computer Science from UC Berkeley and an A.B. in Applied Mathematics/Computer Science from Harvard University. He is an expert in dynamic analysis and optimization, language

design, and programming theory.

**Jon Kerry-Tyerman** is the Vice President of Business Development for Everlaw, where he is focused on growing the business through sales, marketing, and strategic partnerships. Prior to Everlaw, Jon held a series of product management, strategy, and new product development roles at LexisNexis, most recently as the Senior Director of Innovation for the entire Research and Litigation Solutions product and service portfolio. He is also an adjunct professor in the Internet and Intellectual Property Justice Clinic at the University of San Francisco School of Law, where he has been teaching copyright, trademark, free speech, and privacy issues since the fall of 2007.

Jon holds a B.A. in Political Science from the University of California at Davis and a J.D. from the University of San Francisco School of Law. He is an expert in legal product innovation, business strategy, and cross-functional team leadership.

## **7. Marc Lauritsen**

**Marc Lauritsen**, author of *The Lawyer's Guide to Working Smarter with Knowledge Tools* (<http://www.amazon.com/Lawyers-Guide-Working-Smarter-Knowledge/dp/1604428260/>), is president of Capstone Practice Systems ([http://www.capstonepractice.com/capstone\\_intro.pdf](http://www.capstonepractice.com/capstone_intro.pdf)) and of Legal Systematics (<http://www.legalsystematics.com>). Marc has served as a poverty lawyer, directed the clinical program at Harvard Law School, and done path-breaking work on drafting and decision support systems. He's a fellow of the College of Law Practice Management and co-chairs the American Bar Association's eLawyering Task Force. Marc can be reached at (978) 456-3424, [marc@capstonepractice.com](mailto:marc@capstonepractice.com), or [@marclauritsen](https://twitter.com/marclauritsen) on Twitter.

## **8. Dan Katz**

## **9. Stephanie Kimbro**

## **10. Ron Staudt**

## **11. Loic Coutelier**

**12. Tim Hwang**

**13. Ralph Baxter**

**14. You :-)**