Future Law
Reimagining Rules & Legal Services in light of Novel Technologies & Enabled Code

MAS.S____
(Undergraduates with Permission; Cross-Registrants Welcome)

Fall 2017 (H1)
Tuesdays 1:00-2:30pm (First Half of Semester from Sept 12 to Oct 17)
Location E14-633 (Proposed)

Instructors: Gabriel Teninbaum, Dazza Greenwood, Joost Bonsen, Alex Pentland
Credit: 2-0-4, No Final Exam, Project-based Offering

Prerequisites:
Students taking the course should have a strong interest in innovation and legal services, and willingness to work in teams with diverse backgrounds. Engineers, entrepreneurs, statisticians, software engineers, and designers need to work alongside practitioners, law students, and others.

Course Description
Students will explore emerging technologies that will disrupt existing law practices and legal services by building new business models, products or technical concepts. They will understand, experience and build the future of law, lawyers, legal services, and societal rules for technologies and methods. Over a handful of weekly first-half (H1) semester class sessions, students will be exposed to key ideas, principles and frameworks from CEOs of leading startups, corporate leaders, and Media Lab instructors who are leading research in the future of computational law, the legal implications of new technologies, the productization of legal services, and more. Throughout the class, participants will benefit from the Media Lab Entrepreneurship Program's ability to convene diverse students from across campus and around Boston.

Course Themes
The course will explore how organizations ranging in size from new startups to global giants (and also non-profit organizations) are trying to disrupt the status quo in how the law and legal profession is today. Guest lecturers will reveal how new technologies are creating new areas of opportunity, upsetting established players, transforming existing revenue streams (for both better and worse), and how incumbents are responding to these disruptive innovations.

The course will be explore these top thematic areas:

1. **Artificial Intelligence & Productization meets Legal Services**: Role of AI and chatbots in both increasing access and reducing cost of legal services; understanding

pushback from the establishment around "unauthorized practice" or resistance by traditional players to adopting new methods; role of affordability in social justice and those traditionally under-served.

2. **Future of Blockchain, Code, Computational Law & Legal Analytics:** Legal and policy dimensions of big data and personal data markets and ecologies; Computational social science (CSS) on socio-legal dynamics, enabling tools for policy design, adaptive rule making, dynamic regulatory impact analysis, property right and law enforcement; online experiments, sentiment analysis techniques or agent-based social simulations in the legal world, and more including the infrastructure behind Identity, Security & Privacy.

3. **Law of New Technologies & Business Models in Global Context**: Exploring how new inventions and approaches move faster than updates to the legal system; historical examples including Law of the Sea and Space Law, plus domains such as radio frequency allocation, patentability of life, liability of autonomous vehicles, drones, etc.

Weekly Class Structure:
The 90 minute class sessions will be conducted in one of two formats, roughly on an alternating basis throughout the class. Some classes will be held in seminar style, with the first half given as a lecture by a practitioner who is a leader in industry, an innovative start-up, government, foundations, or academia. We will round out the second half with frameworks, group exercises and simulations that reinforce the first-half lecture. Other class sessions will consists of mini-presentations led by student groups. The purpose of these demonstrations will be to allow groups to show early progress on their class projects.

Class Project:
In the first sessions of the class, students will be presented with a selection of topics from which to choose for their project, or to propose their own, and provide an "Idea Pitch". Students will form multidisciplinary teams around these topics and will thereafter begin receiving guidance from project mentors and course instructors, including meetings among individuals and groups outside of scheduled class time. Students will spend the rest of the class meeting with their group members and interacting with course staff and outside advisors to complete the group project (see deliverables below). Team coaching from the instructors, outside of regular class meeting times, is integral to the pedagogical design of the course.

Expected Student Deliverables
Students pick one of three project options, all looking more deeply at one of the key subjects or a compelling opportunity:

1. Write a **Venture Plan** or **Strategic Analysis** for an entrepreneurial or intrapreneurial venture commercializing a compelling emerging technology opportunity; or
2. Build a **Prototype Demonstration** of a compelling emergent legal technology or future contract or service enabler; or
3. Craft an **Innovation Roadmap** identifying big picture of technology and industry trends and analyzing the dominant drivers and inhibitors of innovation and legal transformation.

We encourage students to work in teams of their choosing on either one joint project or with different team members tackling each of the three levels of analysis. We expect serious participation including regular updates, either as presentations or in prose, all adding towards the project which has practical relevance beyond class.

Course Goals:
This survey course is designed to serve as a "tool-kit" for students who want exposure to world-class practitioners working at the leading edge of legal technology and services innovation, with particular emphasis on the digitization, automation, and/or productization of legal services and markets. The course aims to expose students to a wide range of specialty areas within this emerging field. Students will identify sub-areas that fit their interest and have some opportunity to take a deeper dive into the necessary skills, technology, and methods involved.

Course Extension:
Highly motivated students will have the option of participating in an independent study supervised by the course instructors, either during IAP or subsequent semesters, to further develop their venture concept crafted during the class.

Text & Readings:

- *Social Physics: How Social Networks Can Make Us Smarter* (Alex Pentland)
- *Computational Law Open Reading List* -- https://law.MIT.edu/readings

Additional articles and readings will be available for download from the MIT Stellar web site or otherwise online.

Class Schedule

Class: Sept 12
Topic: Intro & Overview of the Future of Law
Speakers: Teninbaum, Greenwood, Bonsen, TBD

Class: Sept 19
Topic: AI & Productization meets Legal Services; idea pitches; project suggestions
Speakers: Greenwood, TBD

Class: Sept 26
Topic: Blockchain, Code, Computational Law & Legal Analytics
   ● GitHub page with additional resources for 9/26 topics: http://Future-of-Law.org
Speakers: Greenwood, Pentland, TBD

Class: Oct 3
Topic: Law of New Technologies & Business Models in Global Context
Speakers: Bonsen, TBD

Oct 10
NO Class -- Columbus Holiday

Class: Oct 17
Topic: Final Project Presentations

Office Hours:
Students are expected to meet at least twice as individuals or as proto-teams with one or more of the instructors outside of class.

Grading:
Grades will be issued based on the following criteria:
- Final Group Project: 40%
- Class Participation 25% (in-class, online community, helping peers)
- Advisor Engagement 10%
- Idea Pitch: 15%
- Group Peer Evaluation 10%

Instructor Bios

Professor Alex "Sandy" Pentland -- Toshiba Professor of Media Arts and Sciences at MIT, is founding Faculty Director of MIT Connection Science, a new research initiative that utilizes communications networks to access and change real-world human behavior. He chairs the World Economic Forum's Data Driven Development Council, is Academic Director of the Data-Pop Alliance, and is a member of the Advisory Boards for Google, Nissan, Telefonica, the United Nations Secretary General, Monument Capital, and the Minerva Schools. In 2012 *Forbes* named Sandy one of the "seven most powerful data scientists in the world", along with Google founders and the CTO of the United States, and in 2013 he won the McKinsey Award from *Harvard Business Review*. He is among the most-cited computational scientists in the world, and a pioneer in computational social science, organizational engineering, wearable computing (Google Glass), image understanding, and modern biometrics. Sandy holds a B.G.S. from University of Michigan and a Ph.D. from the Massachusetts Institute of Technology.

Gabriel Teninbaum <gteninbaum@suffolk.edu> -- Gabe is a professor at Suffolk University Law School, where he serves as Director of the Institute on Law Practice Technology & Innovation, and Director of the Legal Technology & Innovation Concentration (akin to an undergraduate major). This year, he is a Visiting Professor at the MIT Media Lab (Human Dynamics Group), as well as a Visiting Fellow at the Information Society Project at Yale Law

School and a Faculty Associate at the Berkman-Klein Center at Harvard Law School. Gabe's research focuses on the use of new technologies and methods to improve the delivery of legal services. He speaks and consults nationally on this topic, where his clients range from AmLaw 200 law firms (the 200 largest law firms in the US) to companies within the top 15 of the Fortune 500. The educational technology company he founded, SpacedRepetition.com, uses a scientifically-proven algorithm to improve learning and memorization was named one of the top 20 innovations of 2017 by Legal IT News. He has been named one of the FastCase 50, "honoring the law's smartest, most courageous innovators, techies, visionaries, & leaders."

Dazza Greenwood <dazza@civics.com> -- Visiting Scientist at MIT Media Lab, is helping to build the field of computational law through law.MIT.edu and conducting legally related Blockchain research at MIT.edu/blockchain. Dazza is also founder of CIVICS.com, a boutique provider of professional consultancy services for digital identity, automated transactions, data management and technology strategy. Dazza consults to fortune 100 companies and technology leaders on strategic use of advanced technology and large scale cross-boundary integration of business, legal and technology systems, including GE, AT&T, The Hartford, Progressive Insurance, Digital Federal Credit Union, Computer Associates and many others. As an attorney, Dazza served as both in-house and special counsel for technology law, representing corporations and governments and as a litigation expert. Dazza has testified before the US House, US Senate and other legislatures on electronic transactions law and consults consults extensively to the public sector, including to NASA as an Online Identity expert, GSA as a multilateral rules drafting expert, Homeland Security as a multi-state federated systems expert, the UK Cabinet Office on population-scale identity federation rules and many other public & private sector organizations and global NGOs.

Joost Bonsen <jpbonsen@alum.mit.edu> -- Lecturer in Media Arts and Sciences, is an innovation ecologist studying inventive action, entrepreneurial hotspots, and creative ties. His graduate thesis from MIT explored "The Innovation Institute: From Creative Inquiry Through Real-World Impact". Prior to MIT Sloan, Bonsen ran the MIT Founders Project which quantified the economic impact of MIT-related entrepreneurs, findings ultimately published by BankBoston as MIT: Impact of Innovation. Formerly an entrant, mentor, judge, and Lead Organizer of the MIT $100K Entrepreneurship Competition, he was instrumental in the growth of the prize fund to include a Development and Social Impact track. Joost was co-creator and founding Teaching Assistant or instructor of several MIT classes and seminars, including the IAP Nuts & Bolts of New Ventures with Joe Hadzima, Developmental Ventures and Media Ventures with Sandy Pentland, Revolutionary Ventures with Ed Boyden & Joe Jacobson, and most recently Future family of seminars. Joost did his Bachelor's at MIT in Bio-Electrical Engineering and his Master's at MIT Sloan.

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