

LST@Stanford

Dear Friends of the Stanford Program in Law, Science & Technology:



Welcome to this edition of LST@Stanford. This newsletter aims to provide you with an overview of some of the diverse, cutting-edge law and technology activities our Program and its constituent centers carry out. First, we hear from Computer Science Professor and [CodeX](#) research

director Michael Genesereth who, in an interview conducted by Yin-Chen Phang, discusses some of the projects run by CodeX and explains how computational logic can be applied to improve the efficiency of the legal system. Then, Ryan Calo provides us with an update on the [Center for Internet and Society's](#) Consumer Privacy Project. In addition, we have included an overview of recent center activities and events as well as a preview of our upcoming events. For a complete list of our past events – including audio and video captures— please visit our event archive at lst.stanford.edu

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Our affiliates' generous support places LST on a much stronger footing to carry on its exciting work.

I wish you an inspired reading. Please sign up for our mailing list at <http://lst.stanford.edu>. Thank you very much for supporting the Stanford Law School Program in Law, Science & Technology.

Very truly yours,

Roland Vogl
 Executive Director
 Stanford Program in Law, Science & Technology

CodeX: The Stanford Center for Computers and Law [<http://codex.stanford.edu>] explores how information technology can help to improve the efficiency of the legal system. It is an exciting new time where “legal technology” may increase accessibility to the law, thus empowering all parties of the legal system. In this interview, we talk to Michael Genesereth, Associate Professor of Computer Science and Research Director of CodeX, to find out more about the work within the center.

What first interested you in an interdisciplinary partnership such as CodeX and in applying computational logic to the law?

Information technology can be used to improve the legal system, as well as government regulatory systems. Such employment of information technology is not new; for example, Lexus Nexus, Westlaw, and other programs have already been established to help lawyers and those in the legal field to streamline information and increase efficiency. Now the question is, how can we help those untrained in legal jargon — legislators, average citizens, etc. — to have similar types of assistance as well? In my own work with the Logic group at the Computer Science department, we were already involved with designing ways to use computational (formal) logic to improve enterprise management, which was our primary focus. After discussion with legal scholars, however, we discovered an overlap in research interests in applying computational logic to broader issues that would have greater and more immediate social value, i.e. in legal and regulatory frameworks, and this was what led to the collaboration of CodeX. CodeX is a fairly new collaboration organized in the last two or three years, and already we have generated a significant amount of valuable projects and discussion.

Can you give us an outline of the theory and principles guiding the research interests of CodeX?

The concept of computational law has existed since the 1970s, but we are currently especially interested in situated or embedded law and how we can



Michael Genesereth

Encoding the Law

An Interview with Michael Genesereth

Michael Genesereth is an Associate Professor at the Computer Science department, current director of the Logic Group at Stanford, and Research Director of CodeX. His work has become prominent in the areas of Computational Logic and its applications in Enterprise Management and Electronic Commerce. Genesereth has also founded companies specializing in electronic commerce, integrated catalogs on the World Wide Web and commercialization of Artificial Intelligence.

automate law at the point in time when the decision-making process is in play. In one of our research projects run by Harry Surden, Project CALC [Computer Assisted Legal Compliance], we worked with computer-aided design (CAD) software to help architects and builders evaluate construction plans against building codes while they are actually in the design phase itself, receiving instantaneous feedback and correction on the pertinent regulations to their city and state during the idea phase. The goal was to mitigate the often lengthy, time-consuming processes in a human-based feedback loop, where the

architect might fail to meet regulations due to unawareness or misinterpretation of building codes, but would have to wait for feedback from the city council before proceeding or even being made aware of these errors. In our current research interests, we want to expand the scope of projects to have a broader societal impact, ones that are easily accessible and comprehensible to the general public. In addition, we hope in the future to have an impact on the legal community by providing valuable feedback and expanding the sets of possible cases, standards for writing laws, and eliminating ambiguity in these laws. This could potentially shape the future of laws, providing the tools for increased precision and efficiency.

What have been some of the challenges of applying computational logic to the law, and how do you deal with modeling ambiguous laws?

In our collaborations, we have to consider not only the theoretical and practical issues of applying computational logic to the law, but fundamental philosophical questions that arise as well: can laws even be coded, or is human judgment and interpretation always necessary for the implementation of law? There is a whole spectrum of opinion regarding such issues, ranging from those who believe that computational logic either should or should not be applied to the law, to those who believe that it should be explored only in certain areas of law. These areas are the bright-line areas of law — clearly defined rules and standards, such as those found in traffic laws, privacy laws. Many laws, in fact, fall into this category, and for now we are interested in dealing and working with these areas of law. One common misconception is that logic cannot accommodate ambiguity and, therefore, might not be applicable for coding laws and regulations that are intended to be ambiguous. Yet logic is also capable of expressing partial or incomplete information, such that it is not completely deterministic, but actually can be used to describe ambiguity as well. The aim of employing logic in regulations and laws is to eliminate any unintentional vagueness while retaining any intentional ambiguities, thus increasing general precision.

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Michael Genesereth

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What are the current research focuses of CodeX and new projects that have come up?

We have several projects currently in development. The (tentatively named) Stanford Information Property Exchange (SIPX) will be an online exchange medium allowing a faster and more efficient way for individuals and corporations to procure the digital rights to use copyrighted material, facilitating such transactions for both corporation-generated and user-generated media.

We are also developing a project (orgnet) that will collect basic information about companies — location, tax status, internal organization data, CEO, CFO, CIO, general counsel information etc., and make this information available for access among corporations. One of the ramifications of such a project would be to streamline and

make easier mandatory procedures such as SEC filings for public companies.

Our current flagship project, and one that I think could reflect the workings of computational law in a microcosm, is our Digital Department Program. An organizational system for academic departments, this project would encode logistical information and regulations in computational form, allowing tasks such as reserving rooms, planning expenditures and signing up for courses to be done swiftly and cohesively enterprise-wide. On a small scale, this project will probe and discover the basic capabilities and dynamics of running a computationally-based regulatory system and thus enlighten and instruct our future endeavors.

Another brainchild and project-in-the-making that generates a lot of interest and attention is loosely termed the “cop in the back seat” idea. This principle resonates with what I mentioned earlier about

software bringing laws to the attention of the decision-maker at the time of decision. For example, nowadays it is common to have GPS systems in our cars situating us in any geographical location at any given moment in time. What if there were to be devices that informed the driver about speed limits, parking restrictions, and traffic rules specific to the location one was in, at any given time? Or a computer program that can monitor possible user violations of internet policies during the time of use? The answer to these and other questions will potentially confer significant social and public value, and there already seem to be enough cases worth pursuing right now to continue exploring these possibilities.

Thank you for your time, Professor Genesereth.

You're very welcome.

For more information, please visit <http://codex.stanford.edu>

STANFORD PROGRAM IN LAW, SCIENCE AND TECHNOLOGY PROJECT UPDATES

Center for Internet and Society Launches Consumer Privacy Project

Stanford Law School



The Center for Internet and Society received a generous grant from the Rose Foundation to create a website

devoted to improving the privacy and security of Internet platforms and downloads. Collaborating with students at the Law School and a diverse array of Bay Area experts, the Center has taken the first steps toward implementing the grant.

Study after study shows that consumers have a strong subjective preference for greater privacy and data security and a willingness to take steps to protect their information given the right tools. Yet few such tools exist. The Center's solution is to make it easy for consumers to determine what applications match their preferences

and to compare applications and platforms with ease. The Center will create a website that will act as a forum for consumers, application developers, and other experts to share insights and make more informed choices about which Internet applications meet their privacy preferences, security expectations, and related requirements such as openness and portability. It will differ from existing review websites in its focus on values such as privacy and security, in its automatic aggregation of relevant Web content, and in soliciting greater participation from the Internet community.



Lauren Gelman, Executive Director of the Center for Internet and Society and M. Ryan Calo, the Inaugural Fellow of the Consumer Privacy Project.

Lauren Gelman, the Center's Executive Director, and M. Ryan Calo, the Inaugural Fellow of the Consumer Privacy Project, have worked with three students – Seth Gilmore, David Rizk and Michael Stahl – on developing the concept and design as part of a project-driven cyberlaw course this semester. The work recently culminated in a four-hour workshop held Friday, November 21, 2008 at the law school. A diverse group of individuals representing industry, academia (including law, computer science and information studies), the blogosphere and consumer rights organizations actively participated by flagging potential challenges and offering suggestions on everything from scope, to structure, to marketing. Next steps include exactly detailing the design in a report and working with a programming team to implement the new website. The Center aims to have a Beta version of the website by summer 2009.

The Center for Internet and Society wishes to thank the Rose Foundation again for its support. For more information about the CIS, please visit <http://cyberlaw.stanford.edu>.

Stanford Center for the Law and Biosciences



The [Center for the Law & Biosciences](#) recently launched a monthly email newsletter featuring ongoing and upcoming CLB events and

activities, as well as news from affiliated faculty, fellows, and students. For more information on subscribing to this email list and/or related events, contact Emily Murphy at ermurphy@stanford.edu.

SIGNAL (Stanford Interdisciplinary Group in Neuroscience and Law)

SIGNAL is an interdisciplinary discussion group open to graduate students, law students and post-docs interested in discussing issues pertaining to neuroscience and the law. The group meets informally once a month and provides opportunities for members to present ideas, discuss papers or form collaborations. For more information, contact Emily Murphy at ermurphy@stanford.edu.

Check out the CLB Blog:

Examining the social impact of discoveries in the biosciences and the law's role in shaping that impact. Visit today and check back regularly for updates on our work, commentary on current events, and the opportunity to share your thoughts.

<http://lawandbiosciences.wordpress.com/>.

CLB Journal Club



Amanda Pustilnik:
Climenko Fellow and
Lecturer at Harvard
Law School

Meetings of the first law school journal club have resumed and are ongoing, featuring student/fellow led presentations and discussions of cases, articles, scholarly work and current events. Recent topics have included a talk by Amanda Pustilnik,

Climenko Fellow and Lecturer at Harvard Law School, about her paper "Seeing Pain, Measuring Value(s): How Neuroimaging Clarifies the Role of Pain Across Legal Domains," as well as a discussion about the upcoming election focusing on the presidential candidates' health care plans.

Dates next term: 1/22, 2/5, 2/19, 3/5, 3/19, 4/9, 4/23 (all from 12:45-2 pm)

CodeX: The Stanford Center for Computers and Law



Harry Surden: CodeX's
Inaugural Fellow

all the pioneering work he has done in the field of computational law. We look forward our continued collaboration.



Giuseppe Contissa:
CodeX's Fellow for
January 2009

lecturer at the University of Bologna. He authored numerous articles in the realm of legal informatics focusing his research on computable models of law and development of legal ontologies, software agents, game-theory and the law, legislative drafting and legimatics.

CodeX's inaugural fellow Harry Surden has left Stanford to join the University of Colorado Law School faculty. We would like to congratulate Harry on this career move and thank him for

Harry will be followed by Giuseppe Contissa who will join CodeX as a fellow in January 2009. Giuseppe, who holds a PhD in Legal Informatics, has been working as a researcher and

Intellectual Property Litigation Clearinghouse Opens to Public

The public launch of the Stanford IP Litigation Clearinghouse Patent Litigation Module had its public launch on December 8, 2008. The primary goal of this exciting project is to address the critical need for a comprehensive online resource for scholars, policy makers, industry lawyers and litigation support firms in the field of intellectual property litigation.

The first release, the Patent Litigation Module, currently tracks over 23,000 cases filed in the U.S. district courts since 2000. The database includes real-time data summaries, industry indices and trend analysis together with a full-text search engine, providing detailed and timely information that cannot be found elsewhere in the public domain.

For more information about the IPLC, please contact Josh Walker at jwalker@law.stanford.edu.

Transatlantic Technology Law Forum (TTLF)

TTLF Launches Facebook Group

The TTLF has recently launched a discussion group for the TTLF on the social networking site Facebook to further its mission of raising professional understanding and public awareness of transatlantic technology law issues. The goal of the group is to allow anyone interested in transatlantic techlaw issues to connect more easily, and share relevant information with the community. Within a few days the group has grown to over one hundred members interested in transatlantic technology law issues.

Project Updates

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Pablo Ibáñez Colomo on Program Access Rules and Competition



TTLF fellow Pablo Ibáñez Colomo

On November 10th TTLF fellow Pablo Ibáñez Colomo presented his research in a very interesting presentation entitled “Program Access Rules and

Competition in Multichannel Video Markets— A View from Europe,” Pablo’s talk was graciously hosted and co-sponsored by the Stanford Institute for Economic Policy Research (<http://siepr.stanford.edu>). A video capture of the talk can be found in our event archive at <http://lst.stanford.edu>.

For more information about TTLF, please visit: <http://ttlf.stanford.edu/>

RECENT CONFERENCES/EVENTS

Neuroimaging, Pain and the Law Conference

On December 4, 2008, The Stanford Center for Law and the Biosciences sponsored “Neuroimaging, Pain and the Law.” The issue of the existence or extent of pain comes up hundreds of thousands of times each year in the United States legal system, through personal injury suits, disability determinations, and workers compensation. Current methods of detecting pain are well short of perfect. The science of pain is being revolutionized by neuroimaging technologies, which may in turn have important implications for the law. The goal of this conference was to explore how neuroimaging could help the law deal with claims about individuals’ pain. The event featured expert neuroimaging scientists, lawyers, and scholars working at the intersection of these fields. Leading neuroscientists from around the world clarified the current scientific issues and their likely future, while legal scholars and practitioners examined potential effects on the legal system.

case of *Gonzales v. Carhart*, and to criminal laws that attempt to personify the embryo/fetus, and other contexts which appear to propertize embryos, such as IVF and stem cell research. Professor Rao teaches in the areas of constitutional law, family law, property, and the law of the human body.

The Federal Circuit at Stanford

The Federal Circuit Court of Appeals heard cases at Stanford Law School on November 4, 2008. For an audiocapture of the court session, please visit <http://www.cafc.uscourts.gov/archive.htm> and <http://oralarguments.cafc.uscourts.gov>.

The court session was followed by a program entitled “The Federal Circuit Visits the Valley— Discourse and Dinner,” which was co-sponsored by the Stanford Program in Law, Science and Technology, Santa Clara Law School and the Federal Circuit Bar Association.

CLB Speaker Series: Radhika Rao



UC Hastings Professor of Law Radhika Rao

On December 1, 2008, UC Hastings Professor of Law Radhika Rao spoke on “Property, Privacy, and Other Legal Constructions of the Embryo.” Her analysis spanned from the status of the embryo/fetus in abortion law, especially the recent

Eighth Annual Intellectual Property Scholars Conference

On August 7 and 8, 2008, Stanford Law School was host to the Eighth Annual IP Scholars Conference (IPSC 2008), bringing together intellectual property scholars to present their research and works-in-progress for critique, advice and recommendations from their professional colleagues. IPSC 2008 provided a platform for open discussion that generated much useful feedback and kept both the presenters and the participants updated on the research being pursued across the spectrum of current IP issues.

The conference was co-sponsored by the Berkeley Center for Law and Technology, UC Berkeley School of Law; the Intellectual Property Law Program, Benjamin N. Cardozo School of Law at Yeshiva University; the Center for Intellectual Property Law and Information Technology, DePaul University College of Law; and the Stanford Program in Law, Science &

Technology.

The two-day conference featured seven plenary sessions and a total of ninety-two presentations held during breakout sessions. The breakout sessions were organized in the following categories: Copyright, Patents, Trademarks, IP & Property, International IP, IP & Culture, Traditional Contours, IP and Creativity, Patent Failure and Patent Reform, First Amendment and Speech Protections, Cross-Disciplinary IP, Empirical Studies, Innovation, Cyberlaw, Trade Secrets and False Advertising. The ninth annual IPSC will be held at Cardozo School of Law in New York and is tentatively scheduled for August 6-7, 2009. Recordings of IPSC 2008 can be found in our event archive at <http://lst.stanford.edu>, and more general information about the conference series can be found at ipscholars.org.

Fifth Annual Stanford E-Commerce Best Practices Conference

“Privacy is like oxygen — you don’t notice it until it’s gone.”

— E-Commerce Conference Participant

The fragility of online privacy, along with many other current issues pertaining to doing business online, framed the discussions of the Fifth Annual Stanford E-Commerce Best Practices Conference held at the Law School in June 2008.

The conference, which is co-sponsored by the Stanford Program in Law, Science & Technology, its Center for E-Commerce, and the San Francisco Bay Area Chapter of the Association of Corporate Counsels (ACC), featured panels that covered topics spanning from commercial contracts, copyright, patent best practices, corporate law, compliance with worldwide consumer protection regulations, online privacy and electronic discovery. The panelists included Ecommerce industry experts from

law firms and companies like YouTube, Microsoft, Yahoo! Inc., Oracle, Apple, Williams Sonoma. Many knowledgeable panelists also came from academia, including professors from Stanford Law School, UC Berkeley and visiting faculty from Europe.

Among other topics, the Patent Best Practices panel highlighted the relevancy of Standard Setting Organizations (SSOs) to e-commerce companies and also provided recommendations on how to set up new SSOs.

The bottom line conclusion of the conference’s online privacy panel was “Good privacy is good business.” Panelists suggested that data should not be stored longer than necessary, and that it should be encrypted during transferal to eliminate preventable flaws. They warned that data stored longer than necessary could become a liability. Transparency was also emphasized as an approach to help consumers understand a company’s core values, while pervasive data collection and aggressive marketing may be perceived as threatening to consumers concerned about their privacy.

The Consumer Protection panel addressed the question of how Ecommerce businesses can best comply with consumer protection regulations around the world.

For an audiocapture of the conference please visit our event archive at <http://lst.stanford.edu>.

Transatlantic Information Law Symposium

The first Transatlantic Information Law Symposium was held at Stanford Law School on June 14, 2008. The symposium, co-sponsored by the LST Program’s Transatlantic Technology Law Forum (TTLF) and the Freeman Spogli Institute for International Studies (FSI), brought together leading experts from the United States and the European Union to discuss current issues in information law and provided for a unique exchange of ideas about how to approach these issues. Speakers included law professors from the U.S., Austria, Belgium, the Czech

Republic, Germany and Switzerland. Speakers engaged in lively comparisons of the different legal cultures and philosophies pertaining to freedom of speech and privacy regulation in the Internet context, as well as the use of property rights and contracts to govern online behavior.

Upcoming Events

CIS Machinima Conference— February 20, 2009

The Stanford Conference on Intellectual Property and Biotechnology— May 8, 2009

Legal Frontiers in Digital Media— May 15-16, 2009

6th Annual Ecommerce Best Practices Conference

For more information about our upcoming events, please visit our website at <http://lst.stanford.edu>.

About *LST@Stanford*

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