

Harry Surden
University of Colorado Law School
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Boulder, CO 80309
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ACADEMIC AND EMPLOYMENT HISTORY

University of Colorado Law School Boulder, CO
Professor of Law 2008 – Present
(Full Professor with Tenure)

Teaching Areas: Patent Law; Introduction to Intellectual Property Law (Patents, Copyright, Trade Secret, Trademark); Computers and Law; Tort Law; Problem Solving, Judgment, and Decision-Making.

Research Areas: Artificial Intelligence and Law; Computer Science and Law; Legal Theory; Legal Informatics; Artificial Intelligence and Ethics; Autonomous Systems Intellectual property with focus on Patent Law; Privacy Law.

Awards and Honors: University of Colorado Provost's Faculty Achievement Award for Tenured Faculty (2018 - 2019), Awarded Gilbert Goldstein Research Fellowship (effective 2020 – 2021). Austin Scott Honorary Lecture (2022).

Stanford Law School Stanford, CA
Associate Director of Stanford CodeX Center for Legal Informatics (CodeX) 2023 – Present

Visiting Scholar, Stanford University 2022

- Visiting scholar at Stanford University for the 2022 calendar year, primarily conducting interdisciplinary law and computer science research on Computable Contracts at the Stanford Law School's CodeX center.

Fellow, Stanford Center for Computers and the Law (CodeX) 2006 – 2008

- Conducted interdisciplinary research at Stanford Law School CodeX Center (jointly operated with the Stanford School of Engineering) applying methods, paradigms, and technologies from the field of computer science to law.

United States District Court San Francisco, CA
Law Clerk to the Honorable Martin J. Jenkins, Northern District of California 2005 – 2006

Cisco Systems New York
Software Engineer 2000 – 2001

Bloomberg L.P. New York
Software Engineer and Senior Programmer 1995 – 1999

EDUCATIONAL BACKGROUND

Stanford Law School J.D., 2005
Awards: Graduation with Honors
Stanford Law School Intellectual Property Writing Award
Pro-Bono Distinction Award

Cornell University B.A., 1995
Cum Laude Honors in Government
Phi Beta Kappa Honor Society
Award for Distinction in all Subjects, Dean's List 1991-1995

PUBLICATIONS AND ACCEPTED FOR PUBLICATION

Harry Surden, *Generative Artificial Intelligence and Law: An Overview* (forthcoming in *Fordham Law Review*, 2024).

Harry Surden, *Large Language Model AI Advances, and Impact on the Practice of Law* (forthcoming in the *Cambridge Handbook on Artificial Intelligence and Law*, 2024).

Harry Surden, *Naïve Realism, Cognitive Bias, and the Benefits and Risks of AI*, *Yale Journal on Regulation Online*, Notice and Comment (Spring 2023).

Harry Surden, *Computable Law*, in *The Cambridge Handbook of Artificial Intelligence and Private Law* (Ernest Lim, ed.) (Expected publication, Spring 2023, Cambridge University Press).

Anthony Aguirre, Peter Bart Reiner, Harry Surden, & Gaia Dempsey, *AI Loyalty and Governance in The Oxford Handbook on Artificial Intelligence Governance*, (Published 2022, Oxford University Press).

Harry Surden, *Values Embedded in Legal Artificial Intelligence* (*IEEE Technology and Society*, peer-reviewed, published Spring 2022).

Harry Surden, *Machine Learning and Law: An Overview*, in *Research Handbook on Big Data Law* (Roland Vogl, ed.) (2021, Edward Elgar Publishing).

Anthony Aguirre, Gaia Dempsey, Harry Surden and Peter Bart Reiner, *AI Loyalty: A New Paradigm for Aligning Stakeholder Interests* (September 2020, *IEEE Transactions on Technology and Society*, peer-reviewed).

Harry Surden, *The Ethics of Artificial Intelligence in Law: Basic Questions*, in *The Oxford Handbook of Ethics of AI* (Markus Dubber, ed., 2020).

Harry Surden, *Artificial Intelligence and Law: An Overview*, 35 *GA. ST. U. L. REV.* 1306 (2019).

Harry Surden, *Bridges II: The Law–STEM Alliance & Next Generation Innovation*, 112 *NW. U. L. REV. ONLINE* 133 (2018), (short, invited symposium response).

Harry Surden & Mary-Anne Williams, *Technological Opacity, Predictability, and Self-Driving Cars*, 38 *CARDOZO L. REV.* 121 (2016).

Harry Surden, *Machine Learning and Law*, 89 *WASH. L. REV.* 87 (2014).

Harry Surden, *Technological Cost as Law in Intellectual Property*, 27 *HARV. J.L. & TECH.* 135 (Fall 2013).

Harry Surden, *Computable Contracts*, 46 *U.C. DAVIS L. REV.* 629, (approx. 70 pages), (December 2012).

Harry Surden, *Autonomous Agents and Extension of Law*, Invited Contributor: Online Symposium for “A Legal Theory for Autonomous Agents”, *Concurring Opinions Blog*, February 16, 2012.

Harry Surden, *Efficient Uncertainty in Patent Interpretation*, 68 *Washington and Lee Law Review* 1737, (approx. 80 pages), (December 2011).

Harry Surden, *The Variable Determinacy Thesis*, 12 *Columbia Science and Technology Law Review* 1, (91 pages), (April 2011).

Harry Surden, *Structural Rights in Privacy*, 60 *SMU L. Rev.* 1605, (Approx. 28 pages), (2007). (Winner of Stanford Law School Intellectual Property Writing Award).

Harry Surden, Michael Genesereth, Bret Logue, *Representational Complexity in Law*, *Proceedings of the 11th International*

Conference on Artificial Intelligence and the Law, 193-194, (peer reviewed abstract), (2007).

WORKS IN PROGRESS AND UNDER REVIEW

Harry Surden, *Predictive Analytics and Law*

Harry Surden, *Artificial Intelligence and Law*, Academic Book (currently in proposal, expected AY 2023-24)

Harry Surden, *Computable Law: An Overview* (law review work in Progress).

Harry Surden, *False Positive and False Negative Errors in Law* (work in progress).

Harry Surden, *Principles of Problematic Patents* (work in progress).

Harry Surden, *Critical Technical Studies* (work in progress).

Harry Surden, *Bayesian Rules and Standards* (work in progress).

Harry Surden, *Some Certainty about Legal Uncertainty*, (work in progress).

RESEARCH GRANT AWARDS

Michael Genesereth, Harry Surden, *Computer Assisted Legal Compliance in Facility Design*, Stanford CIFE Center for Integrated Facility Engineering (2006 – 2007).

ADDRESSES, PANELS AND INVITED PRESENTATIONS

“Demystifying Large Language Models: Impacts on Professions Like Medicine and Law”, Northwestern University School of Medicine, September 2023.

“GPT-4 and the Securities and Exchange Commission”, Invited Presentation to the Securities and Exchange Commission (SEC), July 2023.

“Large Language Models and Law”, University of Neuchatel, Neuchatel Switzerland, July 2023.

“Large Language Models and Law”, University of Paris, La Sorbonne, Paris, France. June 2023.

“Computable Contracts: The Contract Object Model (COM)”, International Conference of Artificial Intelligence and Law (ICAIL), Braga, Portugal June 2023.

“Computable Contracts: The Contract Object Model (COM)”, Stanford University, April 2023.

“The Impact of GPT-4 And Large Language Models on Law”, Stanford Law School, Stanford CodeX Futurelaw Conference, April 2023.

“Generative Artificial Intelligence and Law”, University of Colorado Law School, April 2023.

“Honorary Austin Scott Lecture: Artificial Intelligence and Law”, University of Colorado, November 2022.

“Artificial Intelligence and Law: Clark Family Legal Ethics Program”, Gonzaga University Law School, Spokane WA, April 2022.

“A Critical Look at the Metaverse”, Invited Moderator, Stanford Futurelaw Conference, Stanford University, April 2022.

“Comments on *Augmented Lawyering*, by Armour et al.”, Invited Commenter, University of Oklahoma, March 2022.

“Comments on *Calderbank.AI*, by Hunter et al.,” Invited Commenter, Legal Scholars Roundtable on Artificial Intelligence, Loyola University Chicago School of Law, March 2022.

“The State of the Art of Artificial Intelligence and Law”, Conference Organizer and Moderator, Silicon Flatirons Center at the University of Colorado Law School, Boulder, CO, November 2021.

“Artificial Intelligence and the Legal Profession”, Invited Speaker, *Symposium on Artificial Intelligence and the Legal Profession*, Northwestern Law School, Chicago, IL (virtual), September 2021.

“Computable Law”, Invited Speaker, University of California Santa Barbara, Santa Barbara, CA (virtual), March 2021.

“Intellectual Property and Covid-19”, Invited Speaker, University of Colorado Law School, February 2021.

“The Growing Use of Artificial Intelligence by Government in Courts and Agencies”, Conference Moderator and Organizer, Silicon Flatirons Center, Conference Moderator and Organizer, Boulder, CO, December 2020.

“Artificial Intelligence and Ethics”, Invited Speaker, Federal Communications Commission Technical Advisory Committee, August 2020.

“Artificial Intelligence and Impact on the Labor Force”, Conference Moderator and Organizer, University of Colorado, Boulder, CO May 2020.

“Artificial Intelligence and Law: An Overview”, Invited Speaker, United Arab Emirates University, United Arab Emirates, September 2019.

Invited Commenter, Stanford-Northwestern-University of Pennsylvania Junior STEM Forum, Stanford Law School, September 2019.

“Autonomous Vehicles”, Invited Panelist, Conference of World Affairs, University of Colorado, Boulder, CO, April 2019.

“Artificial Intelligence and Law”, Invited Panelist, Georgia State University Law School, Atlanta, GA, April 2019.

“Artificial Intelligence: An Overview”, Invited Speaker, Stanford Law School, Stanford, CA, April 2019.

“Autonomous Vehicles, System Failure, and Liability”, Invited Speaker, Kyushu University, Fukuoka, Japan, January 2019.

“Artificial Intelligence in a Democratic Society”, Invited Speaker, Center on Civil Justice and NYU Law School, NYU Law School, New York, NY, November 2018.

“Commentary on Crashworthy Code”, Invented Commentator, Northwestern/Stanford/Penn Junior Faculty Science and Technology Forum, Northwestern University, Chicago, IL, October 2018.

“Workshop on Artificial Intelligence and Policy”, Invited Speaker, University of California Berkeley, Berkeley, CA, August 2018.

“Social Robotics and the Law”, Invited Speaker, International Conference on Robotics and Automation, Brisbane, Australia, May 2018.

“Artificial Intelligence and Law Overview”, Invited Speaker, Texas A&M Law School, Fort Worth, TX, October 2017.

“Computable Contracts”, Speaker and Organizer, Computable Contracts Workshop, Stanford University, Stanford, CA, 2017.

Invited Commentator, Privacy Law Scholars Conference, University of California, Berkeley, Berkeley, CA, June 2017.

“Values Embedded in Legal Artificial Intelligence”, Invited Speaker, Gruter Conferences, CA, May 2017.

“Values Embedded in Rules-Based Legal Artificial Intelligence Systems”, Invited Speaker, Stanford Futurelaw Conference, Stanford Law School, CA, April 2017

“Predicting the Future of Artificial Intelligence”, Invited Panelist, Silicon Flatirons Conference on Artificial Intelligence, University of Colorado Law School, March 2017.

“Values Embedded in Legal Artificial Intelligence”, Invited Colloquium Speaker, BYU Law School, Provo, UT, March 2017.

“Values Embedded in Legal Artificial Intelligence”, Invited Participant, UCLA PULSE Conference, UCLA Law School, Los Angeles, CA, March 2017.

“Patent Law and Artificial Intelligence”, Invited Speaker, Silicon Flatirons Conference on Patent Law, University of Colorado Law School, Boulder, CO, Jan. 2017.

“The Future of Advertising Law and Policy”, Panel Moderator, Silicon Flatirons Conference on Privacy, University of Colorado Law School, Boulder, CO, Dec. 2016.

“False Positives and False Negatives in Law”, Invited Speaker, Stanford Law School, November 2016.

“Machine Learning and Law”, Invited Speaker, Northwestern Law School, Chicago IL, October 2016.

“Computational Law”, Invited Moderator, Futurelaw Conference, Stanford Law School, Stanford, CA, May 2016.

“Self-Driving Cars, Predictability, and Law”, Invited Speaker, We Robot Conference, University of Miami Law School, Miami, FL, April 2016

“Trends in Artificial Intelligence”, Invited Participant, Vanderbilt Conference on AI and Law, Vanderbilt Law School, Nashville, TN, April 2016

“Self-Driving Cars, Predictability, and Law”, Invited Speaker, Elon Law School, Greensboro, NC, April 2016

“Self-Driving Cars, Predictability, and Law”, Invited Speaker, Univ. of Arizona Law School, Tucson, AZ, February 2016.

“Self-Driving Cars, Predictability, and Law”, Invited Speaker, Stanford Law School, Stanford, CA, October 2015.

“Principles of Problematic Patents”, Presenter, Intellectual Property Scholars Conference, DePaul University Law School, Chicago, IL, August 2015.

“Predicting the Future Using Theory”, Invited Speaker, University of Technology Sydney, Sydney, Australia, May 2015.

“Machine Learning and Law”, Invited Speaker, Sydney Online Legal Services Conference, Sydney, Australia, May 2015.

“Machine Learning in Law”, Invited Speaker, University of Technology Sydney, Sydney, Australia, April 2015.

“Computation and Law”, Invited Speaker, University of Technology Sydney, Sydney, Australia, February 2015.

“When Companies Study Their Customers: The Changing Face of Science, Research, and Ethics”, Panel Moderator, University of Colorado Law School, Boulder, CO, December 2014.

“Machine Learning in Law”, Invited Speaker, Stanford Law School, Stanford, CA, October 2014.

- “The Future of Privacy Law and Policy in the Era of Sensors and Big Data”, Invited Speaker, Bench and Bar Conference, University of Colorado Law School, Boulder, CO, October 2014.
- “Machine Learning in Law”, Invited Speaker, University of Colorado Law School, Boulder, CO, September 2014.
- “Disruptive Innovation on the Internet”, Panel Moderator, Silicon Flatirons Conference on Innovation, University of Colorado Law School, Boulder, CO, September 2014.
- “Principles of Problematic Patents”, Presenter, Intellectual Property Scholars Conference, Univ. of California Berkeley Law School, Berkeley, CA, August 2014.
- “Stanford FutureLaw Conference”, Invited Speaker, Stanford Law School, Stanford, CA, May 2014.
- “Stanford Computational Law Workshop”, Workshop Organizer and Host, Stanford Law School, Stanford, CA, May 2014.
- “Copying and Fair Use”, Panel Moderator, Silicon Flatirons Conference on Copyright, University of Colorado Law School, Boulder, CO, May 2014.
- “Computable Contracts”, Invited Speaker, San Diego Workshop on Computation and Law, University of San Diego Law School, San Diego, CA, March 2014.
- “Computable Contracts”, Invited Speaker, Reinvent Law Conference, Cooper Union, New York, NY, February 2014.
- “The New Frontiers of Privacy Harm”, Panel Moderator, *Silicon Flatirons Conference on Privacy Law*, University of Colorado Law School, Boulder, CO, January 2014.
- “Technological Cost as Law in Intellectual Property”, Invited Speaker, University of San Diego Law School, San Diego, CA, November 2013.
- “Technological Cost as Law in Intellectual Property”, Invited Speaker, University of Las Vegas, Nevada School of Law, Las Vegas, Nevada, October 2013.
- “Software Patents and Their Challenges”, Panel Moderator, *Silicon Flatirons Conference on Software Patents*, University of Colorado Law School, Boulder, CO, October 2013.
- “Technological Cost as Law in Intellectual Property”, Presenter, *2013 Intellectual Property Scholar’s Conference*, Cardozo Law School, New York, NY, August 2013.
- “Principles for Automating Law,” , “Five Principles of Problematic Patents, Invited Speaker, Gruter Conference, Squaw Valley, CA, May 2013.
- “Technological Cost as Law in Intellectual Property”, Presenter, *Drake Law School Intellectual Property Roundtable*, Drake Law School, Des Moines, Iowa, April 2013.
- “Law as Algorithm”, Invited Moderator, *We Robot: Robotics and the Law Conference*, Stanford Law School, Stanford CA, April 2013.
- “Computable Contracts,” Invited Speaker, *University of Colorado Silicon Flatirons Student Organization*, University of Colorado, Boulder, CO, February 2013.
- “Privacy Values by Design,” Panel Moderator, *Silicon Flatirons Conference on Privacy and Technology*, University of Colorado Law School, Boulder, CO, January 2013.
- “Privacy and License Plate Scanning Technologies,” Invited Panelist, University of Colorado Law School, Boulder, CO, November 2012.
- “Scope of Patentability and Other Patent Policy Levers”, Panel Moderator, *Silicon Flatirons Conference on Patent Law and Competition Policy*, University of Colorado Law School, Boulder, CO, October 2012.

“Computable Contracts”, Invited Speaker, Drexel University Law School, Philadelphia, PA, September 2012.

“Computable Contracts, Copyright, and Fair Use”, Speaker, *2012 Intellectual Property Scholar’s Conference*, Stanford Law School, Stanford CA, August 2012.

“Computable Contracts”, Invited Speaker, AustLII Institute, University of New South Wales/University of Technology Sydney, Australia, April 2012.

“Computable Contracts”, Invited Speaker, University of Technology Sydney, Australia, March 2012.

“The Economics of Privacy: The Privacy of the Cutting Edge”, Panel Moderator, Silicon Flatirons Conference on Privacy, University of Colorado Law School, Boulder, CO, December 2011.

“Computable Contracts”, Invited Speaker, Stanford University Law School, Stanford CA, October 2011.

“Computable Contracts”, Invited Speaker, Google Inc., Mountain View, CA, October 2011.

“Supreme Court Preview for 2011 Term”, Invited Panelist, University of Denver School of Law/University of Colorado School of Law, October 2011.

“Computable Contracts”, Presenter, Rocky Mountain Junior Scholars Conference, BYU Law School, Provo, UT, September 2011.

“Computable Contracts”, Speaker, *2011 Intellectual Property Scholar’s Conference*, DePaul University, Chicago, IL, August 2011.

“Commentary: Social Networks, Privacy, and Freedom of Association”, Invited Commenter, *2011 Privacy Law Scholars Conference*, University of California Berkeley Law School, Berkeley, CA, June 2011.

“Computable Contracts”, Invited Speaker, Workshop on Law and Computation, University of Houston Law School, April 2011.

“Interpretation as Constraint Satisfaction”, Invited Speaker, Lewis and Clark Law School, Portland, OR, February 2011.

“The Shifting Privacy Norms of Journalism”, Panel Moderator, Silicon Flatirons Conference on Privacy, University of Colorado Law School, Boulder, CO, December 2010.

“Interpretation as Constraint Satisfaction”, Presenter, Rocky Mountain Junior Scholars Conference, University of Utah Law School, Salt Lake City, UT, September 2010.

“Interpretation as Constraint Satisfaction: A Theoretical Framework for Patent Claim Construction”, Speaker, *2010 Intellectual Property Scholars Conference*, University of California, Berkeley, CA, August 2010.

“Commentary: A Multi-Dimensional Taxonomy of Privacy”, Invited Commenter, *2010 Privacy Law Scholars Conference*, George Washington University Law School, June 2010.

“The Future of the Government Speech Doctrine and Technology”, Speaker, *2010 Government Speech Conference*, University of Colorado Law School, Denver, CO January 2010.

“The Patent Crisis and How the Courts Can Solve It,” Panelist, *2009 TPRC Conference on Communication, Information, and Internet Policy*, George Mason School of Law, Arlington, VA, September, 2009.

“AALS Conference for New Law School Teachers,” Invited Speaker, Washington, D.C., June 2009.

“Evaluating Software Patents,” Panel Moderator, University of Colorado Law School, March 2009.

“Can Computers Come to Legal Conclusions?”, University of Colorado Law School, March 2009.

“Computational Law” with Michael Genesereth, Stanford University, April 2008.

“Representational Complexity in Law”, *International Conference on Artificial Intelligence and the Law*, Stanford Law School, June 6, 2007.

“Law and Computer Science: Applying Computer Science Theoretical Frameworks to Problems in the Law”, Stanford University School of Engineering, *Department of Computer Science*, February 16, 2007.

“Exploring the Boundaries Between Law and Computers”, KZSU-FM, Radio Interview, *Hearsay Culture*, Jan. 17, 2007.

“Enabling Computers to Reason About Laws: Computer Assisted Legal Compliance”, Stanford Law School, *Stanford Center for Internet and Society*, November 2006.

PROFESSIONAL ASSOCIATIONS AND COMMUNITY SERVICE

Member of the Board of the Colorado Intellectual Property Inn of Court, member of founding board.
 Member, Advisory Board for Intellectual Property, Silicon Flatirons Center at University of Colorado.
 AALS Law and Computers Section Executive Committee, 2009, 2010.
 Member of the Board, Colorado Bar Association Intellectual Property Section

UNIVERSITY AND LAW SCHOOL SERVICE ACTIVITIES

Chair, Law School Admissions Committee: 2022 – 2024
 Chair, Law School Admissions Committee: 2022 – 2023
 Faculty Director, Silicon Flatirons Center, 2020 - Present
 Chair, Law School Admissions Committee: 2021 – 2022
 Co-Advisor, Colorado Technology Law Journal, 2008 – 2023
 Chair, Law School Admissions Committee: 2020 – 2021
 Member, Law School Dean Search Committee: 2020 - 2021
 Chair, Law School Admissions Committee: 2019 – 2020
 Interim Executive Director Silicon Flatirons Center: 2019
 Vice-Chair, Law School Admissions Committee: 2018 – 2019.
 Law School Clinical Evaluations Committee Member, 2017 – 2018.
 Law School Appointments and Hiring Committee Member, 2016 - 17
 Vice-Chair, Law School Admissions Committee: 2016
 Chair, Law School Technology Committee: 2013-2014.
 Acting Director of Law School IT/IP Masters in Law (LLM) program 2012-2013.
 Member: Technology Committee 2011 – 2013.
 Co-Chair Law School Technology Committee, 2010-2011.
 Law School Appointments and Hiring Committee Member, 2009-2010.

OTHER ACADEMIC ACTIVITIES

Visiting Scholar, Stanford University, 2022.

Affiliated Faculty, Stanford Center for Computers and the Law (CodeX), Stanford University, 2008 – Present.

Honorary Visiting Research Professor, Faculty of Engineering and Information Technology, *University of Technology Sydney*, Sydney Australia, January 2018 – June 2018.

Organizer, “Stanford CodeX Workshop on Computable Contracts”, Stanford University, September, 2017.

Principal Organizer, “Stanford CodeX Workshop on Computational Law”, Stanford University, May 1, 2014.

Honorary Visiting Research Professor, Faculty of Engineering and Information Technology, *University of Technology Sydney*, Sydney Australia, January 2012 – May 2012.

Honorary Visiting Research Professor, Faculty of Engineering and Information Technology, *University of Technology Sydney*, Sydney Australia, January 2015 – June 2015.

Member of Advisory and PhD Thesis Committee, ATLAS Graduate Student Meg Ambrose.

Member of Advisory and PhD Thesis Committee, Science-Po Graduate Student Megan Ma.

BAR ADMISSION

California State Bar (2005).