Jonathan H. Choi

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Current Appointment

Washington University School of Law, St. Louis, MO
James Carr Professor of Law, 2025 - present
Courses: Corporate Taxation, Law and Artificial Intelligence, NLP Empirical Legal Studies Seminar

Scholarship

Working Drafts

<u>*Off-the-Shelf Large Language Models Are Unreliable Judges*</u>

> I conduct the first large-scale empirical experiments to test the reliability of large language models (LLMs) as legal interpreters. Combining novel computational methods with the results of a new survey, I find that LLM judgments are highly sensitive to prompt phrasing, output processing methods, and choice of model. I also find that frontier LLMs do not accurately assess linguistic ordinary meaning, and I provide original evidence that this is in part due to post-training procedures. These findings undermine LLMs' credibility as legal interpreters and cast doubt on claims that LLMs elucidate ordinary meaning.

Prose and Cons: Evaluating the Legality of Police Stops with Large Language Models (with David Abrams)

> Using 41,332 attorney-coded police stops from 2014 to 2024, we fine-tune an LLM to identify whether stops are illegal based on the content of police report narratives. The LLM identifies illegal stops with 88% accuracy and is well-calibrated in its confidence estimates. Importantly, it achieves 95% accuracy on the 75% of cases about which the model was most confident. Using topic modeling and LLM annotation, we also identify the topics in police reports that most drive illegal stops and develop decision rules that police could implement to reduce illegal stops most effectively. We show that no set of rules is as effective as the algorithmic approach.

Published or Forthcoming (Student-Edited)

<u>*Measuring Clarity in Legal Text*</u>, 91 University of Chicago Law Review 1 (2024)

<u>*Subjective Costs of Tax Compliance*</u>, 108 Minnesota Law Review 1255 (2024) (with Ariel Jurow Kleiman)

<u>*Lawyering in the Age of Artificial Intelligence*</u>, 109 Minnesota Law Review 147 (2024) (with Amy Monahan and Daniel Schwarcz)

AI Tools for Lawyers: A Practical Guide, 107 MINNESOTA LAW REVIEW HEADNOTES 1 (2023) (with Daniel Schwarcz)

Beyond Purposivism in Tax Law, 107 IOWA LAW REVIEW 1439 (2022)

Legal Analysis, Policy Analysis, and the Price of Deference: An Empirical Study of Mayo *and* Chevron, 38 YALE JOURNAL ON REGULATION 818 (2021)

The Substantive Canons of Tax Law, 72 STANFORD LAW REVIEW 195 (2020)

An Empirical Study of Statutory Interpretation in Tax Law, 95 NEW YORK UNIVERSITY LAW REVIEW 363 (2020)

In Defense of the Billable Hour: A Monitoring Theory of Law Firm Fees, 70 SOUTH CAROLINA LAW REVIEW 297 (2018) (law school paper)

Early Release in International Criminal Law, Note, 123 YALE LAW JOURNAL 1784 (2014)

Tax Commitment Devices, 15 JOURNAL OF BUSINESS AND SECURITIES LAW 1 (2014) (law school paper)

Published or Forthcoming (Peer-Reviewed or -Edited)

Interrogating LLM Design Under a Fair Learning Doctrine, 2025 ACM CONFERENCE ON FAIRNESS, ACCOUNTABILITY, AND TRANSPARENCY (with Johnny Wei et al.)

AI Assistance in Legal Analysis: An Empirical Study, 72 JOURNAL OF LEGAL EDUCATION (forthcoming 2025) (with Daniel Schwarcz)

How to Use Large Language Models for Empirical Legal Research, 180 JOURNAL OF INSTITUTIONAL AND THEORETICAL ECONOMICS 214 (2024) (invited)

Large Language Models as Tax Attorneys: A Case Study in Legal Capabilities Emergence, 382 PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY A: MATHEMATICAL, PHYSICAL AND ENGINEERING SCIENCES 1 (2023) (with John Ney et al.) (invited)

LegalBench: A Collaboratively Built Benchmark for Measuring Legal Reasoning in Large Language Models, 37 PROCEEDINGS OF THE CONFERENCE ON NEURAL INFORMATION PROCESSING SYSTEMS TRACK ON DATA AND BENCHMARKS 44123 (2023) (with Neel Guha et al.)

A Limited Defense of Efficiency in a Tax-and-Transfer Framework, 37 SOCIAL PHILOSOPHY AND POLICY 252 (2023) (invited)

ChatGPT Goes to Law School, 72 JOURNAL OF LEGAL EDUCATION 387 (2023) (lead author, with Kristin Hickman, Amy Monahan & Daniel Schwarcz)

Other Works in Progress

Empirical Tax Complexity (with Ariel Jurow Kleiman)

> Tax law is perennially criticized for its complexity, but there has been little empirical study linking specific sources of legal complexity to observed taxpayer confusion. This paper proposes a novel approach: we scrape and analyze data from Reddit and TurboTax fora in which taxpayers post detailed questions about tax filing. We identify patterns of confusion and trace them back to statutory text, Treasury regulations, and IRS publications. In doing so, we establish which elements of the underlying law are most confusing to taxpayers and therefore which simplification efforts policymakers should prioritize.

Deceleration by Taxation (with Paul Connell)

> Rapid advances in AI capabilities have sparked calls to decelerate the implementation of AI due to concerns about safety risks, externalities, and other job losses. Most proposals to date have focused either on temporary pauses (prohibiting further development of AI models) or quotas (limiting the rollout of new AI models). We prove theoretically that deceleration by taxation is weakly preferable to both pauses and quotas and is strictly preferable using plausible assumptions. We demonstrate substantial welfare gains from using taxation rather than pauses or quotas using a heterogeneous agent model with empirically determined parameters.

Machine Learning and Deterrence (with Daniel L. Chen, Henrik Sigstad, and Ramya Dhatri Vunikili)

> What is the impact of artificial intelligence on the legal system? In a general economic model of legal compliance, we show that although predictive algorithms can optimally reduce both type I and type II errors, relying on algorithmic predictions in legal decision-making may—due to statistical discrimination— undermine individuals' incentives to comply with the law. We empirically quantify the extent of such statistical discrimination in a range of predictive models applied to a corpus of Brazilian labor court cases.

Computational Analysis of Canon Use at the Supreme Court, 1791 - 2024 (with Nina Mendelson) (pre-registration draft)

> We use LLMs to identify and analyze canons of statutory interpretation over the entire life of the Supreme Court. We then propose and apply an LLM-powered clustering algorithm with human-in-the-loop supervision to group canons. Our results reveal previously unknown canons, track canon use over time, and identify the conditions under which canons are applied.

Interpretable Text-Based Causal Inference with Large Language Models (with Paul Connell)

Popular methods for causal inference in social science, like regression analysis, conventionally can only incorporate numerical or categorical data. We present four techniques to incorporate free-form text in causal inference using LLMs, evaluating their goodness-of-fit and prediction error rates. We evaluate the accuracy of coefficient estimates, goodness-of-fit, and prediction error rates of all four models using a Monte Carlo simulation on a synthetic dataset with known coefficient values. We also describe statistical best practices for incorporating text data in causal inference, specifically why and how to address multicollinearity when text data proxies for variables of interest.

An Agentic Approach to Judging: Generative Agent Simulations of US Supreme Court Justices (with Zhuang Liu and Zhitao Huang)

We create LLM-powered agentic simulations for each of the current Justices of the U.S. Supreme Court and use these agents to predict these Justices' decisions, obtaining a high degree of out-of-sample accuracy. The reasoning generated by these agentic AI-judges also closely aligns with the written reasoning of the Justices.

Automated Corpus Linguistics

I use LLM-driven corpus linguistics in order to automatically apply best practices in corpus linguistics.

Other Employment

Harvard Law School, Cambridge, MA
Donald C. Alexander Visiting Professor in Tax Law, Fall 2025
Courses: AI and the Future of Law, Corporate Taxation

University of Southern California Gould School of Law, Los Angeles, CA
Professor of Law, 2023 - 2025
Courses: AI and the Future of Law, Corporate Taxation, Legislation and Regulation

University of Minnesota Law School, Minneapolis, MN
McKnight Land-Grant Professor (declined), 2023
Solly Robbins Faculty Research Scholar, 2022 - 2023
Associate Professor, 2020 - 2023
Courses: Corporate Taxation, Federal Income Taxation, Legislation and Regulation

New York University School of Law, New York, NY
Fellow, 2018 - 2020

MPL Risk, New York, NY
Co-Founder, 2025 - present

Solomon AI, Los Angeles, CA and New York, NY
Co-Founder and Head of AI, 2023 - 2025

Wachtell, Lipton, Rosen & Katz, New York, NY
Associate, 2014 - 2018

Education

Yale Law School, J.D., 2014

> *Yale Law Journal*, Executive *Bluebook* Editor
>
> *Yale Journal on Regulation*, Founding *Bulletin* Co-Director

Dartmouth College, B.A., *summa cum laude*, 2011

> Triple major: Computer Science (high honors for thesis), Economics, and Philosophy
>
> Thesis: *A Solution to k-Exclusion with O(logk) RMR Complexity*
>
> Honors: Phi Beta Kappa, Sigma Xi (scientific honor society), Woodbury Memorial Law Prize

Other Writing

"An Original Take on the Original Meaning of the Sixteenth Amendment", JOTWELL, June 7, 2024

"The Case for a Tilt *Toward* Revenue in Tax Administration", JOTWELL, Apr. 18, 2023

"Democrats Should Finally Close the Carried Interest Loophole for the Wealthy," op-ed, WASHINGTON POST, September 14, 2021

"A Survey of Law Professors on Tax Reform," YALE JOURNAL ON REGULATION: NOTICE AND COMMENT, August 25, 2021

"Are Agencies Really More Purposivist than Courts?," YALE JOURNAL ON REGULATION: NOTICE AND COMMENT, October 2, 2019

"The Most-Cited Tax Articles of All Time," YALE JOURNAL ON REGULATION: NOTICE AND COMMENT, May 11, 2019

Selected Media

ABA Journal, *ABC News*, *Bloomberg News*, *Bloomberg Law*, *Business Insider*, *CBS News*, *CNN*, *Fast Company*, *Fox News*, *MIT Technology Review*, *Mother Jones*, *NBC Nightly News*, *New York Times Dealbook*, *NPR*, *Reuters*, *The New Yorker*, *The Practice*, *The Star Tribune*, *USA Today*, *The Washington Post*

Other Selected Presentations

American Bar Association, Law School Admissions Council, West Academic, Minnesota State Bar Association, Sansad TV (Indian parliamentary TV station), U.S. District Court for the District of Massachusetts Bench and Bar Conference

Academic Presentations

2026   Harvard Law School Faculty Workshop (planned); Harvard Journal on Law and Technology Symposium on Agentic AI (planned); Yale Law School Statutory Theory Seminar (planned); Yale Law School Legislation Roundtable (planned); Stanford Law School Anti-Discrimination Law x AI Conference (planned); Harvard Law School and Economics Colloquium (planned); Georgetown Law School Legislation Colloquium (planned); University of Connecticut Faculty Workshop (planned); Brooklyn Law School Faculty Workshop (planned)

2025   National Bureau of Economic Research Summer Institute, Law and Economics and Economics of Crime (joint session); AI Economics in the OpenAI Forum; University of Chicago Seminar on Current Trends in Public Law Scholarship; ETH Zurich and University of Zurich Workshop & Lecture Series in Law & Economics; Conference on Data Science and Law; International Conference on Artificial Intelligence and Law, Workshop on Legal Argument Mining; United States District Court for the District of Massachusetts Bench Bar Conference; Association of American Law Schools Annual Meeting (Legislation Section, Law and Technology Section); Georgetown Symposium on Legal Interpretation and Data; University of Hong Kong Law and Technology Center Workshop; Online Workshop for the Computational Analysis of Law; University of Southern California Gould School of Law Faculty Workshop; National Tax Association Annual Conference

2024   Yale Law School Theories of Statutory Interpretation Seminar; William and Mary Law School Faculty Workshop; Harvard Law School Seminar on the Legal Profession; Conference on Neural Information Processing Systems (NeurIPS) Workshop on Causality and Large Models (CaLM); Conference on Neural Information Processing Systems (NeurIPS) Workshop on Statistical Frontiers in LLMs and Foundation Models (SFLLM); University of Southern California Gould School of Law Faculty Workshop; University of Toronto Law and Economics Summer Workshop; University of Southern California Center for Law and Social Science Workshop; SMU Dedman School of Law Faculty Workshop; Conference on Empirical Legal Studies; ABA Tax Section Midyear Meeting

2023   Conference on Neural Information Processing Systems; Harvard/Stanford/Yale Junior Faculty Forum; Yale Law School Law, Economics and Organization Workshop; University of Pennsylvania Law and Economics Seminar; University of Virginia Tax Conference; Georgetown University Law Center Legislation Roundtable; Max Planck Institute Conference on Machine Learning and Law; University of Toronto Law School Faculty Workshop; Ohio State University Information Governance Colloquium; National Tax Association Annual Conference; University of Denver Sturm College of Law Faculty Workshop;

University of Florida College of Law Faculty Workshop; Northwestern University Tax Colloquium; Loyola Law School, Los Angeles Faculty Workshop; Florida State University Tax Scholarship Workshop; University of San Francisco Law School Tax Policy Colloquium; Association of American Law Schools Panel on "Statutory Interpretation in the Era of High Textualism"

2022   University of Virginia School of Law Faculty Workshop; Cornell Law School Faculty Workshop; University of Miami Law School Faculty Workshop; Northwestern/Penn/Stanford Junior Faculty Forum for Law and STEM; American Law and Economics Association Annual Meeting; Junior Tax Scholars Workshop; Max Planck Institute Law and Economics Seminar; National Tax Association Annual Conference; University of Minnesota Law School Faculty Squaretable; University of Illinois College of Law Faculty Workshop; Conference on Empirical Legal Studies; Singapore Management University Computational Legal Studies Conference; Online Workshop for the Computational Analysis of Law; Duke Law School Tax Policy Seminar; Boston College Tax Policy Workshop

2021   Duke University Annual Administrative Law Symposium; University of Minnesota Public Law Workshop; University of Minnesota Law School Faculty Squaretable; UC Irvine Law Tax Policy Colloquium; University of Wisconsin Faculty Workshop; University of Toronto Faculty Workshop (COVID-19 cancellation); Indiana University Maurer School of Law Tax Policy Colloquium; Break into Tax Series; University of Florida Tax Policy and Public Finance Colloquium; USD-Davis-Hastings Tax Law Speaker Series; Online Workshop for the Computational Analysis of Law Conference; Association of American Law Schools New Voices in Administrative Law and Legislation Panel; Association of American Law Schools New Voices in Taxation Panel; Arizona State University Justifying Taxation Conference

2020   Law and Society Association Conference; New York University Lawyering Scholarship Colloquium; National Tax Association Conference; Florida-Michigan-Virginia Virtual Law and Economics Workshop; University of Oregon Law Tax Policy Colloquium; University of Minnesota Law School Faculty Squaretable; University of Toronto Law & Economics Colloquium (COVID-19 cancellation); Junior Tax Scholars Workshop; Critical Tax Conference; AALS Annual Meeting

2019   Conference on Empirical Legal Studies; Harvard Law School Caselaw Access Project Summit; New York University Lawyering Scholarship Colloquium; Law and Society Association Conference; Critical Tax Conference

2018   New York University Lawyering Scholarship Colloquium

Grants

Keston Exploratory Research Award ($100,000), Kommerstad Faculty Imagination Fund ($15,000)

Service

Affiliations: Faculty Associate, Berkman Klein Center for Internet and Society at Harvard University; Research Affiliate, Center for Empirical Research in the Law at Washington University (St. Louis); Co-Director, Center for Law and Social Science at the University of Southern California

Advisor: Asian Pacific American Law Students Association; Myriad Legal Consulting; Venture Capital and Technology Association; Privacy, Cybersecurity, and Technology Law Association

Committees: Dean Search Committee; Lateral Hiring Committee; Tenure and Promotion Committee; Academic Affairs Committee; Faculty Works in Progress Committee; Faculty and Staff Recognition Committee; SJD Admissions Committee

External Service: Chair-Elect, AALS Section on Legislation and Law of the Political Process; Area Organizer, Conference on Empirical Legal Studies; Program Committee Member, ACM Symposium on CS and Law (CSLAW); Area Chair, ACM Conference on Fairness, Accountability, and Transparency (FAccT); Class Secretary, Yale Law School

Reviewer: *Science*; *Journal of Legal Analysis; Journal of Law and Economics*; *Journal of Empirical Legal Studies*; *Journal of Law and Empirical Analysis*; *Yale Law Journal*; *Minnesota Law Review*; *University of Chicago Law Review; Columbia Law Review*

Bar Admission

New York, 2015