Neel Guha

Contact

E-mail: nguha@cs.stanford.edu
Homepage: http://www.neelguha.com/

Education

2021–	PhD in Computer Science, Stanford University Advisor: Christopher Ré
2020–	JD, Stanford Law School
2018–2019	MS in Machine Learning, Carnegie Mellon University Advisor: Virginia Smith
2014–2018	BS with Honors in Computer Science, Stanford University Thesis: *Aggregating Model Spaces*

Experience

2021–	PhD Student, HazyResearch Lab
2019–	Graduate Student Fellow at Stanford RegLab
2019–2020	Visiting Student at HazyResearch Lab (Stanford Computer Science)
2018–2020	Research Assistant at Magic Lab (Stanford Mechanical Engineering)
2018–2020	Research Assistant at School of Computer Science (Carnegie Mellon)
Summer 2017	Software Engineering Intern at Laserlike
Spring 2017	Policy Intern at the Office of Strategic Planning (OSP), Federal Communications Commission
Summer 2016	Software Engineering Intern at Google
Summer 2015	Research Assistant, Institute for Quantitative Social Science (Harvard)

Law and policy publications

[1] **AI Regulation Has Its Own Alignment Problem: The Technical and Institutional Feasibility of Disclosure, Registration, Licensing, and Auditing**
George Washington Law Review (forthcoming 2024)
Neel Guha*, Christie M. Lawrence*, Lindsey A. Gailmard, Kit T. Rodolfa, Faiz Surani, Rishi Bommasani, Inioluwa Deborah Raji, Mariano-Florentino Cuéllar, Colleen Honigsberg, Percy Liang, and Daniel E. Ho

[2] **Private Enforcement in the States**
University of Pennsylvania Law Review (forthcoming 2023)
Diego Zambrano, **Neel Guha**, Austin Peters, and Jeffrey Xia

[3] **ChatGPT and Physicians' Malpractice Risk**
JAMA Health Forum (2023)
Michelle M. Mello and **Neel Guha**

[4] **Vulnerabilities in Discovery Tech**
35 Harvard Journal of Law & Technology 281 (2022)
Neel Guha, Peter Henderson, and Diego Zambrano

Computer science publications

[5] **LegalBench: A Collaboratively Built Benchmark for Measuring Legal Reasoning in Large Language Models**

Conference on Neural Information Processing Systems, Datasets and Benchmarks Track (2023)
Neel Guha*, Julian Nyarko*, Daniel E. Ho*, Christopher Ré*, Adam Chilton, Aditya Narayana, Alex Chohlas-Wood, Austin Peters, Brandon Waldon, Daniel N. Rockmore, and Diego Zambrano, Dmitry Talisman, Enam Hoque, Faiz Surani, Frank Fagan, Galit Sarfaty, Gregory M. Dickinson, Haggai Porat, Jason Hegland, Jessica Wu, Joe Nudell, Joel Niklaus, John Nay, Jonathan H. Choi, Kevin Tobia, Margaret Hagan, Megan Ma, Michael Livermore, Nikon Rasumov Rahe, Nils Holzenberger, Noam Kolt, Peter Henderson, Sean Rehaag, Sharad Goel, Shang Gao, Spencer Williams, Sunny Gandhi, Tom Zur, Varun Iyer, and Zehua Li

[6] **Embroid: Unsupervised Prediction Smoothing Can Improve Few-Shot Classification**
Conference on Neural Information Processing Systems (2023)
Neel Guha*, Mayee F. Chen*, Kush Bhatia*, Azalia Mirhoseini, Frederic Sala, and Christopher Ré

[7] **Don't Use a Cannon to Kill a Fly: An Efficient Cascading Pipeline for Long Documents**
International Conference on AI and Law (2023)
Zehua Li, **Neel Guha**, and Julian Nyarko

[8] **Holistic Evaluation of Language Models**
Transactions on Machine Learning Research (2023)
Percy Liang*, Rishi Bommasani*, Tony Lee*, Dimitris Tsipras, Dilara Soylu, Michihiro Yasunaga, Yian Zhang, Deepak Narayanan, Yuhuai Wu, Ananya Kumar, and Benjamin Newman, Binhang Yuan, Bobby Yan, Ce Zhang, Christian Alexander Cosgrove, Christopher D Manning, Christopher Re, Diana AcostaNavas, Drew Arad Hudson, Eric Zelikman, Esin Durmus, Faisal Ladhak, Frieda Rong, Hongyu Ren, Huaxiu Yao, Jue WANG, Keshav Santhanam, Laurel Orr, Lucia Zheng, Mert Yuksekgonul, Mirac Suzgun, Nathan Kim, **Neel Guha**, Niladri S. Chatterji, Omar Khattab, Peter Henderson, Qian Huang, Ryan Andrew Chi, Sang Michael Xie, Shibani Santurkar, Surya Ganguli, Tatsunori Hashimoto, Thomas Icard, Tianyi Zhang, Vishrav Chaudhary, William Wang, Xuechen Li, Yifan Mai, Yuhui Zhang, and Yuta Koreeda

[9] **Ask Me Anything: A Simple Strategy for Prompting Language Models**
International Conference on Learning Representations (2023) **(Spotlight)**
Simran Arora*, Avanika Narayan*, Mayee F Chen, Laurel J Orr, **Neel Guha**, Kush Bhatia, Ines Chami, Frederic Sala, and Christopher Ré

[10] **Pile of Law: Learning Responsible Data Filtering from the Law and a 256GB Open Source Legal Dataset**
Conference on Neural Information Processing Systems, Datasets and Benchmarks Track (2022) **(Oral Presentation)**
Peter Henderson*, Mark S. Krass*, Lucia Zheng, **Neel Guha**, Christopher D. Manning, Dan Jurafsky, Daniel E. Ho

[11] **When Does Pretraining Help? Assessing Self-Supervised Learning for Law and the CaseHOLD Dataset**
International Conference on AI and Law (2021) **(Carole Hafner Best Paper Award)**
Lucia Zheng*, **Neel Guha***, Brandon R. Anderson, Peter Henderson, Daniel E. Ho

[12] **Bootleg: Chasing the Tail with Self-Supervised Named Entity Disambiguation**
Conference on Innovative Data Systems Research (2021)
Laurel Orr*, Megan Leszczynski*, Simran Arora, Sen Wu, **Neel Guha**, Xiao Ling, Christopher Ré

[13] **Leveraging Administrative Data for Bias Audits: Assessing Disparate Coverage with Mobility Data for COVID-19 Policy**
ACM Conference on Fairness, Accountability, and Transparency (2020)
Amanda Coston, **Neel Guha**, Lisa Lu, Derek Ouyang, Alexandra Chouldechova, and Daniel E. Ho

[14] **Machine Learning for AC Optimal Power Flow**
Climate Change Workshop at the International Conference on Machine Learning (2019) **(Honorable Mention for Best Paper)**
Neel Guha, Zhecheng Wang, Matt Wytock, and Arun Majumdar

[15] **One-Shot Federated Learning**
2nd Workshop on Machine Learning on the Phone and other Consumer Devices at Neural Information Processing Systems (2018) **(Oral Presentation)**
Neel Guha, Ameet Talwalkar, and Virginia Smith

White papers

[16] HAI Policy Brief: The AI Regulatory Alignment Problem (2023)
Neel Guha*, Christie M. Lawrence*, Lindsey A. Gailmard, Kit T. Rodolfa, Faiz Surani, Rishi Bommasani, Inioluwa Deborah Raji, Mariano-Florentino Cuéllar, Colleen Honigsberg, Percy Liang, and Daniel E. Ho

[17] Building a National AI Research Resource: A Blueprint for the National Research Cloud (2021)
Contributing Author: §5 (Data Privacy Compliance), §6 (Technical Privacy and Virtual Data Safe Rooms), §8 (Managing Cybersecurity Risks).

[18] On the Opportunities and Risks of Foundation Models (2021)
Contributing Author: §3.2 (Legal Applications) and §5.4 (Legality)

[19] ResX Task Force Final Report: Our Vision for Stanfords Undergraduate Residences (2018)
ResX Task Force

Book chapters

[20] **Gamesmanship in Modern Discovery Tech**
In *Legal Tech and the Future of Civil Justice* (Cambridge University Press, 2023)
Diego Zambrano, **Neel Guha**, and Peter Henderson

Academic honors

2023	Stanford Interdisciplinary Graduate Fellowship
2023	Stanford HAI Graduate Fellowship
2021	Finalist, Paul & Daisy Soros Fellowship for New Americans
2021	Carole Hafner Best Paper Award, 2021 International Conference on Artificial Intelligence and Law
2021	Gerald Gunther Prize for Outstanding Performance in Health Law
2021	John Hart Ely Prize Prize for Outstanding Performance in Creating a National Research Cloud
2020	Finalist, Knight Hennessy Scholarship
2019	Best Paper Honorable Mention, Climate Change Workshop at ICML 2019

Presentations

11/2023	*LegalBench*, Google, Mountain View, CA.
11/2023	*Private Enforcement in the States*, Faculty Colloquium at University of Washington School of Law, Seattle, WA. Co-presented with Prof. Diego Zambrano.
11/2023	*The Risks, Rewards, and Ethics of Using Artificial Intelligence*, Annual Bench Bar Conference, Bar Association of San Francisco, San Francisco, CA.
10/2023	*Private Enforcement in the States*, Conference on Empirical Legal Studies, Chicago, IL. Co-presented with Prof. Diego Zambrano and Austin Peters.
10/2023	*Private Enforcement in the States*, Public Law Workshop, University of Minnesota Law School. Co-presented with Prof. Diego Zambrano.
8/2023	*Understanding Liability Risk from Health Care AI Tools*, Anesthesia Grand Rounds, Department of Anesthesiology, Perioperative and Pain Medicine, Stanford University School of Medicine, Stanford, CA. Co-presented with Prof. Michelle Mello.

7/2023	*Large Language Models for Civil Justice*, AI & Legal Help Crossover, Stanford Law School Legal Design Lab (Virtual).
6/2023	*LegalBench*, LLM x Law Hackathon, New York, NY.
5/2023	*Private Enforcement in the States*, Civil Procedure Workshop (Northwestern), Chicago, IL. Co-presented with Prof. Diego Zambrano, Austin Peters, and Jeffrey Xia.
4/2023	*LegalBench*, CodeX FutureLaw 2023, Stanford Law School, Stanford, CA.
6/2020	*Update on Previous Work: Machine Learning for AC Optimal Power Flow*, Climate Change Workshop, International Conference on Learning Representations (Virtual).
6/2019	*Machine Learning for AC Optimal Power Flow*, Climate Change Workshop, International Conference on Learning Representations, Long Beach, CA.
12/2018	*One-shot Federated Learning*, 2nd Workshop on Machine Learning on the Phone and other Consumer Devices at Neural Information Processing Systems, Montreal, Canada.

Other teaching

6/2023	Aided in preparation of session on artificial intelligence for DC Circuit Judicial Conference meeting with Prof. Daniel E. Ho.

Editorial service

Referee/program committee member for:

Adaptive and Multitask Learning Workshop (ICML 2019)
AI + Humanitarian Assistance and Disaster Response Workshop (NeurIPS 2020)
Climate Change Workshop (NeurIPS 2019, NeurIPS 2020, ICML 2021)
Foundation Models for Decision Making Workshop (NeurIPS 2022)
International Conference on AI and Law (2023)
Knowledge Representation & Reasoning Meets Machine Learning Workshop (NeurIPS 2019)
National Legal Language Processing Workshop (EMNLP 2022)
NeurIPS Datasets & Benchmarks Track (2021, 2022, 2023)
Socially Responsible Language Modeling Research (NeurIPS 2023).

Discussant for:

Conference on Empirical Legal Studies (2023)

Committee/leadership service

2022	Senior Articles Editor, *Stanford Law Review* (Volume 75)
2021	Member Editor, *Stanford Law Review* (Volume 74)
2018	ResX, Provostial Task Force, Stanford University
2017-18	Committee on Residental Learning, Stanford University

Coverage

GPT-4 Wins Chatbot Lawyer Contest But is Still Not as Good as Humans, NewScientist (September 5, 2023)

Private Enforcement in the States, by Prof. Diego Zambrano (Stanford) et al., The Volokh Conspiracy (March 27, 2023).

A 'Messy' Tangle of Private Right Enforcement In State Law, Law360 (March 2, 2023).

Federal Use of AI Tools Prompts Researchers to Build New Dataset, Bloomberg Law (October 3, 2022).

Borrowing from the Law to Filter Training Data for Foundation Models, Stanford HAI (August 10, 2022).

The Datasets Were Looking At This Week, FiveThirtyEight (July 13, 2022).

And Justice For All: Improving Access Through Digital Tools, Innovative Design, The Stanford Lawyer (June 28, 2021).

Smartphone Location Data Can Leave Out Those Most Hit by Covid-19, The Wall Street Journal (April 5, 2021).

Last updated: November 18, 2023*

*CV template inspired by Christopher Morris.