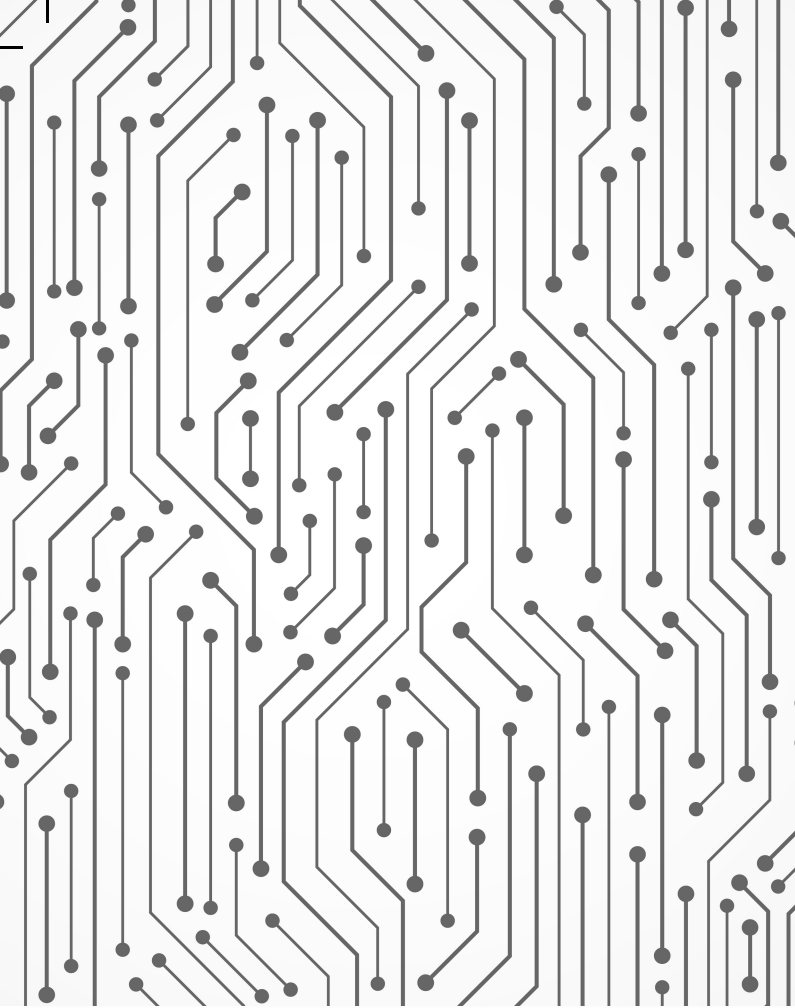


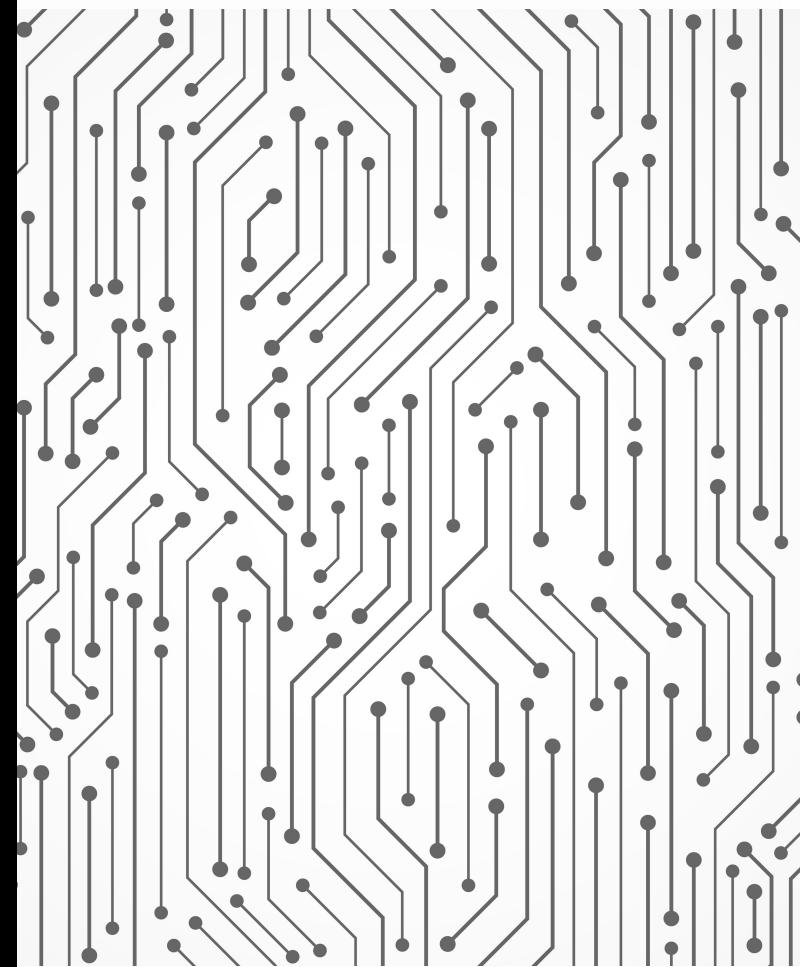


The Tech Policy Lab is a community of faculty, researchers and students investigating the intersection between technology and politics.

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Radical collaborations in politics and technology

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Cornell Tech Policy Lab 2020-2021 Annual Report

Mission:

This year marked the launch of Cornell University's Tech Policy Lab. We launched the lab to study the effect of emerging tech on politics (and vice versa). The comparative advantage of the TPL is to take both the tech and politics seriously. Often, tech is studied by engineers and computer scientists, grounded less in politics. Or the astute political voices are less versed in tech. We seek to engage with and integrate the two to be able to better understand the interaction between tech and politics and how they influence each other.

Issue Areas:

Military Technology:

Without going into an exhaustive list of tech policy issues, the last couple of decades have made manifest the importance of understanding the relationship between tech and politics. After the 9/11 terrorist attacks, the United States fielded armed drones that it came to rely on for counterterrorism strikes. The armed drones, perhaps effective in targeting suspected terrorists, raised democratic accountability questions. If American pilots and service people were no longer at risk during a counterterrorism raid, would Americans care how—or that—the raid was conducted, which from time to time meant that other countries' civilians were killed? It turns out that no, Americans are less concerned about the conduct of conduct when they have less skin in the game.

Misinformation:

The 2016 election introduced the impact of a quite different technology on politics: the targeted use of misinformation on social media with an eye toward manipulating public opinion and shaping electoral outcomes. Congressional investigations of social media CEOs were eye-opening. Members of Congress did not understand the inner workings of social media platforms and misinformation and tech CEOs did not understand politics. The exchanges again revealed the gap between those who understand politics and those who understand tech.

Pandemic:

In 2020, the COVID-19 pandemic gripped the globe. Once again, the political landscape called for tech—this time in the form of contact tracing apps, epidemiological forecasting, and a vaccine—and political leaders were told to “follow the science.” Here again the dynamic revealed gaps between tech and policy. Those urging that political leaders follow the science failed to grasp that science did not speak in one voice, that politics is about making decisions under scientific uncertainty, and that decision outcomes are not binary, in this case about whether citizens get the virus or not, but their relative susceptibility as a function of age, race, and health, traded off with the costs of measures such as lockdowns.

Outcomes:

The TPL conducted research into all of these tech policy areas, culminating in dozens of peer-reviewed articles, quotes and interviews in the top media outlets, and several books. In the fall semester, members of the TPL wrote papers that focused on artificial intelligence, misinformation, and social media platforms. One paper investigated COVID-19-related content on Twitter and Sina Weibo – the largest microblogging sites in the United States and China respectively. In this paper, we examined how the content and user engagement measured by keyword frequencies and hashtags differ across the two platforms. Another paper used GPT-3, a language prediction model that generates human-like text using deep learning, to create news stories where survey respondents then asked to distinguish between human-generated and AI-generated text. Both of these papers underscore the impact of disruptive technologies on the general public across different issue areas, as well as have implications in understanding domestic and international politics.

The lab continues to break down academic silos and foster radical interdisciplinary collaborations at the intersection of politics and technology. Beyond these outputs, the lab's research also revealed the opportunity for industry applications. We spent the second half of the year adding software engineers and developing three different products; details forthcoming. Specifically, we conduct research into the ways that emerging tech can disrupt politics; conduct empirical tests of those ideas; and innovate industry start-ups (i.e. social networking, political communication, and environmental awareness) that build on those concepts and evidence.

Research in Progress

Julie George, Gloria Cai, Keyi Ding, Noah Watson, and Sarah Kreps, “(Mis)Information on Digital Platforms: Lessons From Twitter and Sina Weibo in the Time of COVID-19” under review at Public Health.

Olaf Willner, Jakob Richi, Elliott Ash, and Sarah Kreps, “Natural Language Models as Political Communicators” under review at the Journal of Quantitative Description: Digital Media.

Funding:

Our work has benefited from generous grants from the Milstein Program for Technology and Humanity, Social Science Research Council, the Berkeley Existential Risk Initiative, the Atkinson Center for Sustainability, and the Dean of Arts and Science's New Frontier Grant.

Undergraduate fellows (20-21):

- Gloria Cai
- Naba Deyab
- Keyi Ding
- Benjamin Feldman
- Max Hadden
- Tanvi Manjoshi
- Nina Miller
- Elizabeth Ominsky
- Aryan Valluri
- Nathaniel Watson
- Noah Watson
- Jasper Weed
- Olaf Willner

Graduate fellows:

- Julie George
- Pegah Moradi
- Adi Rao

Postdoctoral fellow:

- Baobao Zhang

Faculty director:

- Sarah Kreps