CITP Next 10 Years

1. Background

1.1. Original invitation

Hi Paul,

I hope all is well. You mentioned you're interested in coming up to Princeton, so I hope this event will be of interest to you!

Princeton’s Center for Information Technology Policy is organizing a conference titled “Tech policy: the next ten years”. The date is Friday, October 25. This will be a flagship conference and we plan to advertise it widely — on campus, at nearby institutions, and online. The goals of the conference are to (1) discuss and help shape the agenda for the next decade of tech policy, (2) identify theories of change, (3) showcase the work of CITP researchers, (4) help students understand tech policy career paths and options by hearing from notable people, and (5) encourage a tech talent surge into government.

I’m writing to invite you to speak on a panel. Our audience will benefit immensely from hearing about your work and your views. Confirmed speakers include Jessical Rosenworcel, Alondra Nelson, Anne-Marie Slaughter, Gabriel Weinberg, and David Robinson (former CITP associate director and now head of policy planning at OpenAI).

It would be great to get a tentative response this week if at all possible. Apologies for the short notice!

Cheers –arvind

Hi Paul,

Delighted that you'll be joining us!

The event will be roughly 9-4 with a reception/mixer from 4-5. We were thinking of a small dinner for the speakers at around 5:30 if you would be interested in staying? It will still give you enough time to catch a train Friday evening. TBH we don't know how many speakers will stay for the dinner

but I and others at CITP would welcome the chance to catch up with you!

Can I get back to you soon on the timing of your panel? Most likely early afternoon but we are juggling things and working out the schedule at the moment.

Cheers –arvind

1.2. Panel prep

Dear Alondra, Anne-Marie, Ed, and Paul,

Thank you again for speaking at the CITP Conference “Tech Policy: The Next Ten Years” on Friday, October 25. We have scheduled you for Panel 1: The Opportunity Ahead from 9:30 to 11am. Please let us know if this time doesn’t work for you. We are all excited to hear from you, individually and in conversation.

The guiding questions for the panel are: Why does tech policy matter? Which areas are most important today, and how might this change over the next decade? Panelists will discuss and help shape the agenda for tech policy. Can policy keep up given rapid changes in technology? How can you help? What is the role of U.S. policy in the global arena?

That said, the split between Panel 1 and Panel 2 is somewhat arbitrary and you should feel free to talk about the topics in Panel 2 as well.

The format is about 10 minutes of opening remarks per panelist followed by a discussion led by the moderator and then audience Q&A. You’re welcome to talk with or without slides — it’s up to you. We’ll reach back out to you with some discussion topics once we know who the moderator is. We’ll make sure the prep needed is minimal.

If you have any travel, transportation, dietary or other needs (such as a place to work and take calls during the event), please contact Jean Butcher (copied) at your earliest convenience.

We look forward to seeing you in a few weeks!

–arvind

1.3. Final org email

Dear Alondra, Anne-Marie, Ed, and Paul,

Thank you again for speaking at the CITP Conference “Tech Policy: The Next Ten Years” on Friday, October 25. We have scheduled you for Panel 1: The Opportunity Ahead from 9:30 to 11am. The moderator for this panel will be Zach Vertin who is the director of Princeton SPIA in Washington DC. I have copied him here. Thank you for moderating the panel, Zach!

As stated in my previous email the guiding questions for your panel are: Why does tech policy matter? Which areas are most important today, and how might this change over the next decade? Panelists will discuss and help shape the agenda for tech policy. Can policy keep up given rapid changes in technology? How can you help? What is the role of U.S. policy in the global arena?

We would like you to prepare about 10 minutes of opening remarks on Why does tech policy matter? Which areas are most important today, and how might this change over the next decade? You’re welcome to talk with or without slides — it’s up to you. If you are using slides, we would like to have your slides by Thursday, October 24th so that we can preload it on a common computer.

Your opening remarks will be followed by a discussion led by Zach and then audience Q&A.

Zach, we have included some potential discussion topics. Please feel free to modify as you see fit.

What are the biggest challenges with policy/regulation in tech policy in the US today?

How should policy makers mediate tensions between public/consumer interests and innovation/ development?

What is the role of regulatory agencies today after the recent ruling on the Chevron Doctrine?

Is global cooperation important in the digital domain? What are the main barriers to global cooperation/policy making?

Based on your own experiences in government or advising regulatory agencies, what factors and dynamics make it so challenging for the US in particular to regulate digital technology and address

its impacts?

We spend a lot of time talking about the guardrails that are not in place. What are the things that we are doing right now both in government and in technology that give you hope and could create real opportunities in the future?

All, please arrive for your panel a little earlier if possible (we recommend 8:45 so that you can get a chance to talk to each other and get situated before the event begins at 9am). Please let me or Tithi know if you have any questions or need any assistance in preparing for this panel. We look forward to seeing you on Friday, October 25th, 2024.

1.4. Timing modification

One quick update:

With such a great group of panelists, Zach suggests that it would be good to avoid 40 minutes of back-to-back presentations and leave more time for a dynamic exchange. Tithi and I agree. If at all possible, could you keep your opening remarks to 5-7 minutes? If you've already prepared a 10 minute talk, I understand.

Have a great weekend, everyone. We are anticipating a full house next Friday.

–arvind

1.5. Agenda

Overview

This conference is for everyone who is interested in ensuring that technology has a positive impact on society. Learn about how you can make an impact on the development and governance of technology, whether in industry or the public sector. Alumni, affiliates, and friends of CITP will reflect on their careers and share advice, while current CITP scholars will present their research that has contributed to ongoing debates on topics including AI, social media, and cybersecurity.

Schedule & Speakers

Breakfast Available – 8:30 to 9 a.m. – (Please note food and drinks are not allowed in the auditorium.)

Opening Remarks – 9 to 9:30 a.m. Arvind Narayanan, Director, CITP and Professor of Computer Science, Princeton University Jennifer Rexford, Provost, Professor of Computer Science, and Gordon Y. S. Wu Professor in Engineering, Princeton University

Panel 1: The Opportunity Ahead – 9:30 to 11 a.m. Why does tech policy matter? Which areas are most important today, and how might this change over the next decade? Panelists will discuss and help shape the agenda for tech policy. Can policy keep up given rapid changes in technology? How can you help? What is the role of U.S. policy in the global arena?

Moderator: Zach Vertin, Director, Princeton SPIA in Washington DC; Lecturer of Public and International Affairs

Panelists: Ed Felten, Co-Founder & Chief Scientist, Offchain Labs, Emeritus, Robert E. Kahn Professor of Computer Science and Public Affairs and the Founding Director of CITP Alondra Nelson, Harold F. Linder Professor, Institute for Advanced Study Paul Ohm, Professor of Law, Georgetown University Law Center Anne-Marie Slaughter, CEO, New America

Break – 11 to 11:20 a.m.

Lightning Talks – 11:20 a.m. to 12:30 p.m.

Moderator: Sayash Kapoor, Computer Science Graduate Student, Princeton University

Lightning Talk Speakers: Jane Castleman, Computer Science Graduate Student, Princeton University Justin Curl, Technology Law & Policy Advisor, New Mexico Department of Justice and J.D. Candidate, Harvard Law School Basileal Y. Imana, CITP Postdoctoral Research Associate, Princeton University Brooke McCarthy, The Princeton School of Public and International Affairs Undergraduate Student, Princeton University Nitya Nadgir, CITP Emerging Scholar, Princeton University Xiangyu Qi, Electrical and Computer Engineering Graduate Student, Princeton University Varun Nagaraj Rao, Computer Science Graduate Student, Princeton University Sujay Swain, Electrical and Computer Engineering Undergraduate Student, Princeton University

Lunch and Networking – 12:30 to 1:45 p.m.

Keynote Speaker – 1:45 to 2:30 p.m. Jessica Rosenworcel, Chairwoman, Federal Communications Commission

Remarks – 2:30 to 2:40 p.m. Amaney A. Jamal, Dean, Princeton School of Public and International Affairs, Edwards S. Sanford Professor of Politics. and Professor of Politics and International Affairs

Panel 2: Theories of Change – 2:40 to 4:10 p.m. How does tech policy change happen? How can diverse career paths contribute to it, including academia, industry, civil society, government, and more? Panelists will reflect on their own careers and share advice for those entering the field.

Moderator: Zeynep Tufekci, Henry G. Bryant Professor of Sociology and Public Affairs and The Princeton School of Public and International Affairs

Panelists: Chloé Bakalar, Chief Ethicist, Meta Pablo Chavez, Adjunct Senior Fellow, Technology and National Security Program, Center for a New American Security David Robinson, Head of Policy Planning, OpenAI Gabriel Weinberg, CEO and Founder, DuckDuckGo

Closing Remarks – 4:10 to 4:15 p.m.

Reception – 4:15 to 5:15 p.m.

2. Brainstorm

2.1. Celebrating CITP

- Anecdote: email from me to Ed Felten, circa 2005
    - Earnest
    - Awkward
- Visiting and giving a talk soon thereafter about the failure of anonymization
    - Doing a little import/export of a grad student from Texas named Arvind Narayanan
    - Meeting Harlan Yu and David Robinson and Joanna Huey
    - A precocious undergrad named Jonthan Mayer
- CITP has had major impact

2.2. Code is Law turns 25

- Larry Lessig published the original version in November 1, 1999.
- Impact
    - On the world
    - But on me too
- Basic thesis: Code is Law
    - Too many thought this was just a descriptive observation.
    - It should have been seen as a call-to-action.
- If we are merely observing how technology changes, we are not doing enough.
    - We are forgetting our agency
- Others
    - I'm building not only on Lessig but on Joel Reidenberg, another CITP alum, and his "Lex Informatica"
    - And Batya Friedman and Helen Nissenbaum and Values in Design
- You hear reflections of these thoughts in various policy pushes today.
    - Dark Patterns, another CITP specialty
    - Duties of Loyalty and other Fiduciary Duties
    - But even today's emerging conversations about Guardrails

2.3. The AI Awkward family reunion

- We each come to the reunion with different:
    - Methods
    - Disciplinary Cousins
    - Values

Subdiscipline	Values	Method	Neighbor	Committees	Agencies
Copyright	Property and Labor	Economic	Economics	Judiciary	Copyright Office
NatSec	Security and Secrecy	Technocratic	PoliSci / Int'l Relations	Homeland Sec.	IC

Subdiscipline	Values	Method	Neighbor	Committees	Agencies
Privacy	Autonomy, Dignity, and Choice	Sociotechnical	Philosophy, Sociology, STS	Commerce	FTC / CFPB

2.3.1. Thesis: We are overlearning the lessons of Copyright

- Evidence: Go to any top-flight ML conference or CS department
  - Find the small pocket of PhD and PostDocs focused on values
  - Odds are very high that a disproportionate percentage of them are focused on copyright.
    - How to measure substantial similarity
    - Fighting over whether copies reside inside the trained weights of the models
- The problem
  - The values: narrow and relatively unimportant, except for labor
    - Even if you don't agree with me on the importance, I hope you can see the problem with the narrowness.
  - The "measurement" trap: A lot of copyright seems amenable to measurement
    - Kolmogorov distance and substantial similarity
    - Fair use's four factors
    - The Sony test's "substantial noninfringing uses"
  - The big pile of money
- What is the Copyright counterweight?
  - Everything else is smaller and newer.
  - And the standard mode is fragmentation:
    - Antitrust and Privacy, the only two comparable in size
    - And then a smattering of narrowly defined fields:
      - National Security
      - Bias and Discrimination
      - Content Moderation
      - Telecomm

        - Platform Regulation
        - Increasingly: Alignment and Safety
        - Lately: Kids

2.4. Decentering Technologists

2.4.1. What engineers are bad at

I can finally write an article explaining why engineers have been so bad at this app layer stuff.

1. Psychology. People wired to solve technical solutions are bad at this kind of thing.
2. Their commitment to efficiency, capitalism, and measurement as the touchstones.
3. It takes a long time to learn one major complex field, let alone master a second.

I need to speak directly to the rare hybrids (Barocas, Gebru, Crawford, and boyd). You are the exception not the rule. You don't scale. You can't duplicate yourselves.

And, if you're being honest, you're probably not equally good at both!

We need teams and translators, not hybridity!

2.4.2. Decentralizing/Decentering/Marginalizing Technologists

- After dinner at UCLA, lots of newish ideas about my prompt engineering point and marginalizing technologists.
- We never ask ourselves: it's important to teach auto mechanics or psychologists or mechanical engineers about algorithmic fairness
    - The difference is because we believe that in any solution about making technology better, we need technologists to play an active and central role
- But I argue that this approach has proven to be very difficult and possibly impossible
    - An impoverished toolkit
    - A rigidity and formalism
    - Too much focus on efficiency as a normative (or supranormative) goal
    - Too much focus on profit maximization

- They are not diverse
- They are in elite classes
- They tend to work for large companies and thus fall prey to the tendencies toward managerialism.

- Those are the polite descriptions. Here are some less polite descriptions: (replace "produce" with "select" if you prefer)
  - They tend to be socially inept
  - They tend to produce a high level of people with low EQ
  - They tend to produce people who are greedier than most
  - They tend to produce people with lower empathy
  - They tend to have a higher level of psychopathic people than others
    - And they tend to select psychopaths for the very best jobs (Musk, Zuckberberg)
- For the first set of concerns, we can try to shift the field to account.
  - This is very, very, very expensive.
  - It pushes against deeply entrenched norms.
  - It's not clear there is time!
- For the second set of concerns, we need to go back to elementary school education.
  - We don't have time!
- But what are we to do?
  - Aren't our hands tied by the fact that they are gatekeepers of the essential knowledge?
  - You can just throw your hands up and lament this, but you *need* them.
- No!
- Response 1: Assuming they are essential, it's not so clear they need to be *central*.
  - We can use them like well-paid technicians.
    - Geek squads, IT people
  - We call all the shots. We do all the architecture.
  - They just implement our plans, and we set social norms so they don't second

guess what we're asking them to do.

- The problem is Amateur Hour!
  - It just takes so long to train them to be nuanced and subtle.
  - Data points on "Privacy" expertise
    - Notwithstanding dozens of conferences, hundreds of papers, and millions of investment, computer scientists still say laughably stupid things about privacy.
      - Example 1: DSNP comment thread
      - Example 2: The GPT-4 System Card's discussion of privacy in 2.8 is just memorization.
- A much more manageable type of education now.
  - Not, "how to define fairness."
  - Better: how to implement what these people are telling us to do.
- Worth some meditation on the different approaches we may end up taking.
  - Computer Scientists are looking to fix the deepest architecture at a theoretical level.
    - They are drawn to the solutions that will bring them the most attention, acclaim, tenure, and funding.
    - They are looking for solutions (maybe unconsciously) that confirms that people like them will continue to be seen as vital to the enterprise (differential privacy).
    - But are those always the only/best solutions?

- Response 2: I'm not so sure they are essential
  - My riff on prompt engineering and the different skill set it is empowering.
  - With all the think pieces on how AI will replace lawyers–why not how it'll replace AI scientists?
- Response 3: They can be the architects of their own obsolescence!
  - It may be that they can come up with new approaches or make decisions at forks in the road that empower non-technologists to really take part in fine tuning.

- What about dual-homed scholars?
    - They are better.
    - I suspect that the sequence matters.
    - Teaching those steeped in humanistic values a little bit of technology is far, far superior to teaching those steeped in data a little bit of ethics and values.
- Jason Hartline's point at CS+Law about ChatGPT meaning that computer scientists paying more attention to human language as a goal for computation
- Trying to crystallize this, a few months into thinking about it:
    - Coders used to be responsible in a very directive way. They wrote code that dictated what systems did.
    - They aren't doing that any more. They are separated from the outputs and conduct.
        - The crux of the explainability and interpretability debates.

1. During GovStack policy mechanisms
    - William Boyd's comments made me think of connecting this to the incentive/move technologists have wielded regularly to argue for the unfathomable complexity of the subject matter
        - And they've been so successful!
        - I've been thinking of every condescending conversation I've ever had where the techie has talked down to me, taking pity at my fundamental misunderstanding.
            - Only to find out that I knew exactly what I was talking about, with precision and accuracy.
            - And in some cases, they've discovered that I understood something deep they didn't understand!
    - This wants me to call the lie to the deep complexity of these systems.
        - They're not that deep!
        - Some of the depth is an intentional move to give them power, authority, and autonomy (leave me alone!)

- So the LLM is the way to dismantle some of this too

3. Moderator Prep and Questions

3.1. Prompt for our talks

We would like you to prepare about 10 minutes of opening remarks on

3.1.1. Why does tech policy matter?

3.1.2. Which areas are most important today, and how might this change over the next decade?

3.2. The guiding questions for the panel are:

3.2.1. Why does tech policy matter?

3.2.2. Which areas are most important today, and how might this change over the next decade?

3.2.3. Panelists will discuss and help shape the agenda for tech policy. Can policy keep up given rapid changes in technology?

3.2.4. How can you help? What is the role of U.S. policy in the global arena?

3.3. Zach's Questions

3.3.1. What are the biggest challenges with policy/regulation in tech policy in the US today?

- The First Amendment.
- Section 230 closing the courthouse doors.

3.3.2. How should policy makers mediate tensions between public/consumer interests and innovation/development?

- False choice.
- Co-creation.

3.3.3. What is the role of regulatory agencies today after the recent ruling on the Chevron Doctrine?

- Anecdote: Administrative Procedures Act?
  - I was 20 years premature!
- Ask a slightly different question: design a new administrative state, what would it look like?
  - We needed to do this before Loper Bright and Jarkesy. More urgent need now.
  - Shoutout Redesigning the Governance Stack

    - Proposal one: It's no longer ex ante or ex post.
        - It's a constant cycle of rules and enforcement and surveillance and adjustment
    - Proposal two: Codesign
        - Judicial injunctions
- Also: Evals!
- Also: Call to arms for this crowd: make IP geolocation great again!

3.3.4. Is global cooperation important in the digital domain? What are the main barriers to global cooperation/policy making?

- Every four years, I fantasize about what our elections would be like if our networks weren't quite so slippery and global.

3.3.5. Based on your own experiences in government or advising regulatory agencies, what factors and dynamics make it so challenging for the US in particular to regulate digital technology and address its impacts?

- Mostly the corrupting influence of corporate money.
    - As also manifest in the form of CS grad student internships and professor sabbaticals.

3.3.6. We spend a lot of time talking about the guardrails that are not in place. What are the things that we are doing right now both in government and in technology that give you hope and could create real opportunities in the future?

- Friction!
- Bureaus of Technology at the FTC and FCC and in the states
    - Shout out Mihir.

4. My Talk

4.1. Celebrating CITP

- Anecdote: email from me to Ed Felten, circa 2005
    - Earnest
    - Awkward
- Visiting and giving a talk soon thereafter about the failure of anonymization

    - Doing a little import/export of a grad student from Texas named Arvind Narayanan
    - Meeting Harlan Yu and David Robinson and Joanna Huey
    - A precocious undergrad named Jonthan Mayer
- CITP has had major impact

4.2. Code is Law turns 25

- Larry Lessig published the original version in November 1, 1999.
- Impact
    - On the world
    - But on me too
- Basic thesis: Code is Law
    - Too many thought this was just a descriptive observation.
    - It should have been seen as a call-to-action.
- If we are merely observing how technology changes, we are not doing enough.
    - We are forgetting our agency
- Others
    - I'm building not only on Lessig but on Joel Reidenberg, another CITP alum, and his "Lex Informatica"
    - And Batya Friedman and Helen Nissenbaum and Values in Design
- You hear reflections of these thoughts in various policy proposals today.
    - Dark Patterns, another CITP specialty
    - Duties of Loyalty and other Fiduciary Duties
    - But even today's emerging conversations about Guardrails

4.3. Decentering Technologists

- CITP recognizes that technologists play a central role in so many critical social contexts and conflicts in the world today.
    - They have long understood the urgent need to train these technologists to understand and perform their work through a broader, more well-rounded, interdisciplinary and humanistic lens.

    - They are an standout example for something going on at Universities around the country.
        - Mandatory ethics training in CS departments.
        - CS AND workshops on the sidelines of the major conferences.
        - Entire conferences: most notably FAccT
    - At Georgetown: Tech, Ethics, and Society minor and the Tech & Society initiative.
- The model is one with technologists at the very center of so many important decisions.
    - In the best cases, they surround themselves with interdisciplinary friends in concentric circles of engagement and advice. Employees, lawyers, advisors, friends.
    - But when push comes to shove, they shut the boardroom doors and make the big decisions without those people. (They tend to let the finance and business people stick around too!)
    - The best we can do is hope that all of our training and advice have stuck.
- Report Card: how is it going?
    - In terms of outputs, not bad!
        - If you look at the steady stream of work coming out of CITP and other Centers, it seems encouraging.
        - If you look at the steady stream of amazing people coming out of these programs, also very encouraging.
    - In terms of results, a mixed bag.
        - Some successes: Work in the federal agencies. Especially FTC, CFPB, and DOJ.
        - Very few legislative or regulatory changes of significance.
    - And the technological results are bad or dismaying.
        - Disinformation and Misinformation.
            - Content moderation assailed and in retreat.
        - Bias, harassment, and discrimination.
        - Surveillance Capitalism and Surveillance surveillance.
        - Economic inequality and labor precarity.
- Why aren't our efforts to create more ethical and socially adept technologists helping?

    - We're sending mixed messages
        - be rigid and formalist
        - while being humanistic and flexible
        - In their best moments: differential privacy and dark patterns
    - We're training people with one set of skills about another set of skills
        - And people from a narrow band of racial, ethnic, and class parts of our society.
    - We're doing this in a system of capitalism and a marketplace of surveillance capitalism.
        - Ari Waldman's Industry Unbound
- Conventional wisdom: So we need to double down and do more.
    - More ethics courses.
    - More interdisciplinary majors.
    - What else can we do?
- The problem:
    - Very, very expensive
    - Pushes against deeply entrenched norms.
    - It's not clear there is time!
- But what are we to do?
    - Aren't our hands tied by the fact that these technologists are the gatekeepers of infrastructural systems and essential knowledge?
- My argument: Perhaps not!
- I'm referring to a shift I began to see about a decade ago, but accelerated with the rise of large language models.
    - Simply put: the role played by the technologist has begun to shift.
        - They have become decentered.
    - Anecdote to motivate the idea: the first time I ever trained a neural network.
        - Shocked and dismayed.
    - The idea that tuning hyperparameters is "more art than science."
    - The endless quest to turn to reinforcement learning for everything.
    - From architect to zookeeper.

- But I see a light at the end of this tunnel.
    - Look at arxiv.org, for example.
        - Not peer reviewed.
        - Often not especially computer scientific.
        - Hey, look what our model did. Isn't that odd?
        - Not to denigrate the rigor or importance, but to highlight the role these humans are playing.
    - Amazing, important results of recent years:
        - poem, poem, poem, poem
        - Chain of Thought reasoning
        - Few-shot learning
        - Zero-shot learning
    - Not only is this not computer scientific, I'm not sure it is the kind of work that needs a technical mindset to do well.
        - The tweet that noticed that "an innocent person will die"
        - The grandmother jailbreak.
        - If these models embed human language and can be mimic our emotional and psychological responses, maybe we need people with the instincts and training of disciplines such as:
            - psychology
            - anthropology
            - philosophy
- The vision I have:
    - Teams of people working together.
    - The technologist is there at the table, maybe in a prominent pride of place.
    - But they're not in the center.
    - And they don't get to kick the rest of us out after we've made our best pitches.
    - They are essential parts of the team, but they are not everything.
- But this world I'm describing is not inevitable, and it can be reversed if we're not careful.

    - Already the computer scientists are computer sciencing, finding ways to reinject advanced technological techniques, making prompting look more like coding.
    - If we're not careful, they can fine-tune their models to need to be programmed rather than talked to.
    - We may face specific architectural choices, and we need to know when they are being made.
    - We need a way to label that move. We need a way to look out for it.
- To be clear: I am not talking about removing or marginalizing technologists and their expertise.
    - I'm hoping by decentering them, I will be helping unleash them.
        - There will be so many interesting and important questions for them to pursue with their distictive training and distinctive methodologies.
        - They will be training the next foundation model, exploring the deep meaning of thought and learning, working on more efficient architectures.
- I think I'm arguing for layer separation.
    - Technologists do a great job with:
        - telecom networks
        - computer architecture
        - operating systems
    - They've caused more problems the higher they've moved up the stack, the more they've interfaced with social systems.
- To end, since we're all educators: For education specifically, maybe it means a new path:
    - Focus on CS if that's the kind of problems you want to pursue.
        - And we should continue to bring in ethics and other disciplines, but maybe we can refocus.
    - But if you're not so predisposed. If you'd rather learn about society or politics or beauty or human flourishing, you don't need to get a CS major.
        - Don't worry, there will be a place at the table for you.

Author: Paul Ohm

Created: 2024-10-25 Fri 07:52

Validate