

Ruth Elisabeth Appel

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EXECUTIVE SUMMARY

Award-winning researcher combining deep technical expertise in AI with empirical social science to shape safe and responsible AI development.

AREAS OF EXPERTISE

AI, trust and safety, bias, misinformation, persuasion, elections, causal inference, data science, wellbeing, ethics, privacy

PROFESSIONAL EXPERIENCE

09/2019 – present Stanford, US	Stanford University Postdoctoral Scholar (08/2024 – present) <ul style="list-style-type: none">• Led research on generative AI content moderation preferences to inform AI alignment• Core contributor to project on third-party AI evaluation• Showed how social media regulation can inform generative AI regulation• Led research on deceptive campaigns and election interference as part of a large-scale academic-industry collaboration with Meta analyzing data from 250 million users• Core contributor to research with Meta on testing misinformation interventions at scale• Worked with cross-functional stakeholders (e.g., research, engineering, legal) SAP Graduate Fellow in Science and Engineering & PACS PhD Fellow (09/2019 – 06/2024) <ul style="list-style-type: none">• Led research uncovering why partisans disagree about content moderation in the US• Led research on a scalable intervention to counter vaccine misinformation• Led research on the ethics and privacy implications of new technologies• Core contributor to research on an intervention to improve youth wellbeing using an app• Communicated results with relevant stakeholders and the public via meetings with high-level decision-makers, conference presentations, popular press articles, and inputs to policy drafts Teaching Assistant (09/2021 – 12/2021, 01/2021 – 03/2021) <ul style="list-style-type: none">• Led research methods and R programming sections and developed technical course materials
06/2020 – 09/2020 San Francisco, US	Google LLC Quantitative User Experience Research Intern <ul style="list-style-type: none">• Analyzed large-scale Google Cloud user log data to provide UX recommendations• Added to Google's research infrastructure by importing machine learning software packages
02/2019 – 06/2019 Durham, US	Duke University, Center for Advanced Hindsight Health Division Research Associate <ul style="list-style-type: none">• Designed large-scale experiments to improve health behaviors such as vaccine uptake• Led a workshop on using big data for psychological research
04/2017 – 06/2017 Bonn, Germany	Telekom Deutschland GmbH Strategy Department Intern <ul style="list-style-type: none">• Provided edtech market analysis and strategic recommendations for senior leadership
09/2016 – 12/2016 New York, US	Delegation of the European Union to the United Nations Fifth Committee Section (Administration and Budget) Intern <ul style="list-style-type: none">• Prepared and participated in high-level meetings on budget issues and the 2030 Agenda

EDUCATION

09/2019 – 06/2024 Stanford, US	Ph.D. in Political Communication (<i>Nathan Maccoby Dissertation Award</i>) Stanford University; Ph.D. Advisor: Jennifer Pan; GPA: 4.0 Dissertation: Countering Social Media Manipulation: Three Studies of Social Media Manipulation and Efforts to Counter It Dissertation Committee: Jennifer Pan, Jeffrey Hancock, Susan Athey, Dan Jurafsky (Chair) Course focus: Research methods, causal inference, science and interpersonal communication Selected courses: ECON293 ML and Causal Inference, ECON281 Experiments for Impact, COMM324 Language and Technology
09/2023 – 06/2024 Stanford, US	M.S. in Computer Science Stanford University, Department of Computer Science; Advisor: Dan Jurafsky; GPA: 4.0 Course focus: Artificial intelligence, natural language processing, data science Selected courses: CS224N NLP with Deep Learning, CS399 Political Bias in LLMs, CS246 Mining Massive Data Sets, CS145 Data Systems, CS161 Algorithms, CS129 Applied ML

09/2017 – 06/2019 Paris, France	Master in Public Policy (<i>summa cum laude</i>) Sciences Po, School of Public Affairs Course focus: Emerging technologies and public policy, policy analysis
06/2018 – 08/2018 New York, US	Visiting Researcher Columbia University, Columbia Business School; Advisor: Sandra Matz
08/2013 – 10/2016 Mannheim, Germany	B.Sc. Economics University of Mannheim, Department of Economics; Minor: Political Science
09/2015 – 04/2016 Kingston, Canada	Visiting Student in Economics and Political Studies Queen's University at Kingston, Faculty of Arts and Science; GPA: 4.0

PEER-REVIEWED PUBLICATIONS

- Appel, R. E.,** Pan, J., & Roberts, M. E. (2023). Partisan conflict over content moderation is more than disagreement about facts. *Science Advances*. <https://doi.org/10.1126/sciadv.adg6799>
★ top 5% of all research scored by Altmetric
- Matz, S. C., **Appel, R. E.,** & Croll, B. (2022). Privacy and ethics in the age of Big Data. In S. C. Matz (Ed.), *The psychology of technology: Social science research in the age of Big Data* (pp. 379–420). American Psychological Association. <https://doi.org/10.1037/0000290-012>
- Appel, R. E.,** & Matz, S. C. (2021). Psychological targeting in the age of Big Data. In *Measuring and Modeling Persons and Situations*. Elsevier. <https://doi.org/10.1016/b978-0-12-819200-9.00015-6>
- Matz, S. C., **Appel, R. E.,** & Kosinski, M. (2020). Privacy in the Age of Psychological Targeting. *Current Opinion in Psychology*, 31. <https://doi.org/10.1016/j.copsyc.2019.08.010>

WORKSHOP PAPERS

- Appel, R. E.** (2024). Generative AI Regulation Can Learn from Social Media Regulation. *NeurIPS Regulatable ML Workshop*, December 2024, Vancouver, Canada. <https://ruthappel.github.io/assets/pdf/Generative-AI-regulation-can-learn-from-social-media-regulation.pdf>

UNDER PEER REVIEW

- Appel, R. E.,** Kim, Y. M., Pan, J., Xu, Y., ..., Kiewiet de Jonge, C., Franco, A., Mason, W., Stroud, N. J. & Tucker, J. A. How deceptive online networks reached millions in the US 2020 elections. Under review at *Nature Human Behaviour*.
- Appel, R. E.,** Roozenbeek, J., Rayburn-Reeves, R., Corbin, J., Basol, M., Compton, J., & van der Linden, S. Psychological inoculation improves resilience to and reduces willingness to share vaccine misinformation. <https://doi.org/10.31234/osf.io/ek5pu>. Under review at *Scientific Reports*.
- Pei, R., Grayson, S. J., **Appel, R. E.,** Soh, S., Garcia, S., Huang, E., Jackson, M. O., Harari, G. M., & Zaki, J. Bridging the empathy gap: Reducing empathy misperceptions increases social connectedness. Under review at *Nature Human Behaviour*.

SELECTED WORK IN PROGRESS

- Appel, R. E.,** Pan, J., & Roberts, M. E. How partisanship affects preferences for content moderation in large language models.
- Appel, R. E.,** Athey, S., Karlan, D., Koutout, K., Luca, M., Manjeer, U., Sacher, S., & Wernerfelt, N. Combating misinformation on social media.
- Minson, J., Erlich, A., Gans-Morse, J., Higgins, C., **Appel, R. E.,** ..., Wang, K., & Zeldin, N. Combating information avoidance in wartime Russia: A multidisciplinary field experiment.
- Longpre, S., Kapoor, S., **Appel, R. E.,** Bommasani, R., Klyman, K., Sahar, M., ..., Narayanan, A., & Liang, P. The Obstacles and Opportunities in Designing Effective External AI Red Teaming.

POLICY IMPACT AND PUBLIC ENGAGEMENT

- Appel, R. E.** (2024). Strengthening AI Accountability Through Better Third Party Evaluations. <https://hai.stanford.edu/news/strengthening-ai-accountability-through-better-third-party-evaluations>

Appel, R. E. (2024). EU DSA Election Guidelines Input. <https://ruthappel.github.io/assets/pdf/EU-DSA-Election-Guidelines-Input.pdf>

Appel, R. E. (2023). It's not just about facts: Democrats and Republicans have sharply different attitudes about removing misinformation from social media. <https://theconversation.com/its-not-just-about-facts-democrats-and-republicans-have-sharply-different-attitudes-about-removing-misinformation-from-social-media-216809>

★ read 40k times

Schaake, M., **Appel, R. E.**, Duplichen, D. M., Einstein, L., Elhai, W., Dhafer Muhammad Faishal, M., ... Zhao, J. (2020). *Input on the European Commission White Paper "On Artificial Intelligence – A European approach to excellence and trust."* https://hai.stanford.edu/sites/default/files/2020-07/HAI_WhitePaper_v4B.pdf

Matz, S. C., **Appel, R. E.**, & Kosinski, M. (2019). Rethinking privacy in the age of psychological targeting. <https://blogs.lse.ac.uk/businessreview/2019/11/21/rethinking-privacy-in-the-age-of-psychological-targeting/>

INVITED TALKS

Appel, R. E., Kim, Y. M., Pan, J., Xu, Y., ..., Kiewiet de Jonge, C., Franco, A., Mason, W., Stroud, N. J. & Tucker, J. A. (2024, September). *How deceptive online networks reached millions in the US 2020 elections*. Cornell Tech, New York, US.

Appel, R. E., Kim, Y. M., Pan, J., Xu, Y., ..., Kiewiet de Jonge, C., Franco, A., Mason, W., Stroud, N. J. & Tucker, J. A. (2024, May). *Reach of deceptive online networks is limited but highly concentrated*. Hertie School, Berlin, Germany.

Appel, R. E., Kim, Y. M., Pan, J., Xu, Y., ..., Kiewiet de Jonge, C., Franco, A., Mason, W., Stroud, N. J. & Tucker, J. A. (2024, March). *Reach of deceptive online networks is limited but highly concentrated*. Graphika, virtual.

Appel, R. E., Kim, Y. M., Pan, J., Xu, Y., ..., Kiewiet de Jonge, C., Franco, A., Mason, W., Stroud, N. J. & Tucker, J. A. (2024, January). *Reach of deceptive online networks is limited but highly concentrated*. Atlantic Council DFRLab, virtual.

Appel, R. E., Kim, Y. M., Pan, J., Xu, Y., ..., Kiewiet de Jonge, C., Franco, A., Mason, W., Stroud, N. J. & Tucker, J. A. (2024, January). *Reach of deceptive online networks is limited but highly concentrated*. Google Jigsaw, virtual.

Appel, R. E. (2023, November). *Countering misinformation on social media*. NABE TEC, Santa Clara, US.

Appel, R. E., Pan, J., & Roberts, M. E. (2023, November). *Partisan conflict over content moderation is more than disagreement about facts*. Stanford Data Science Democracy Day, Stanford, US.

Appel, R. E., Pan, J., & Roberts, M. E. (2023, October). *Partisan conflict over content moderation is more than disagreement about facts*. Content Moderation and Free Speech on Social Media Workshop, Munich, Germany.

Appel, R. E. (2021, December). *Ethics and Privacy in the Age of Psychological Targeting*. Promoting Research in Social Media and Health Symposium, San Francisco, US.

CONFERENCE TALKS

Appel, R. E., Kim, Y. M., Pan, J., Xu, Y., ..., Kiewiet de Jonge, C., Franco, A., Mason, W., Stroud, N. J. & Tucker, J. A. (2024, September). *How deceptive online networks reached millions in the US 2020 elections*. Trust and Safety Research Conference, Stanford, US.

Appel, R. E., Pan, J., & Roberts, M. E. (2024, February). *Partisan conflict over content moderation is more than disagreement about facts*. SPSP Annual Convention, San Diego, US.

Appel, R. E., Pan, J., & Roberts, M. E. (2023, September). *Partisan conflict over content moderation is more than disagreement about facts*. Trust and Safety Research Conference, Stanford, US.

Appel, R. E., Pan, J., & Roberts, M. E. (2023, July). *Partisan conflict over content moderation is more than disagreement about facts*. IC2S2 Conference, Copenhagen, Denmark.

Appel, R. E., Basol, M., Rayburn-Reeves, R., Corbin, J., van der Linden, S., & Roozenbeek, J. (2022, May). *Bad Vaxx Online Game Intervention Increases Discernment and Reduces Willingness to Share Vaccine Misinformation*. ICA Annual Conference, Paris, France.

Appel, R. E. (2021, February). *Mental Health in Context: Individual Differences, Activities, and Locations as Predictors of Momentary Stress, Anxiety, and Loneliness*. SPSP Annual Convention, online.

Appel, R. E. (2019, August). *Privacy in the Age of Psychological Targeting*. SPSP Summer Psychology Forum, St. Louis, US.

INVITED POSTERS

Appel, R. E., Pan, J., & Roberts, M. E. (2023, March). *How Partisanship Influences Perceptions of Censorship*. D3 Conference on Inequality in the Digital Age at Harvard Business School, Cambridge, US.

CONFERENCE POSTERS

Appel, R. E., Pan, J., & Roberts, M. E. (2023, February). *How Partisanship Influences Perceptions of Censorship*. SPSP Annual Convention, Atlanta, US.

Appel, R. E., Basol, M., Rayburn-Reeves, R., Corbin, J., van der Linden, S., & Roozenbeek, J. (2022, February). *Bad Vaxx Online Game Intervention Increases Discernment and Reduces Willingness to Share Vaccine Misinformation*. Psychology of Media and Technology Preconference at the SPSP Annual Convention, San Francisco, US.

Appel, R. E. (2020, February). *Privacy in the Age of Psychological Targeting*. SPSP Annual Convention, New Orleans, US.

SELECTED PRIZES AND AWARDS

06/2024 Stanford Communication Department Nathan Maccoby Dissertation Award (\$1,000)

10/2023 LLM Agents Hackathon at AGI House, 3rd prize for personalized AI shopping agent

SELECTED FELLOWSHIPS AND GRANTS

09/2024 – present Stanford Impact Labs Postdoctoral Fellowship

09/2024 – 09/2025 Stanford High Impact Technology Fund Award (\$38,000)

04/2024 – 04/2025 Stanford TomKat Center Innovation Transfer Grant (\$30,000)

12/2023 – 12/2024 Center on Philanthropy and Civil Society Grant (\$2,000)

01/2024 – 06/2024 Stanford Emergence Accelerator Program for Impact Entrepreneurs

09/2019 – 06/2024 SAP Stanford Graduate Fellow in Science and Engineering (\$52,920 p.a.)

09/2022 – 07/2023 Siegel Family Endowment Research Fellow

09/2022 – 06/2023 Center on Philanthropy and Civil Society PhD Research Fellow (\$79,650)

06/2022 – 09/2022 Stanford Impact Labs Summer Collaborative Research Fellow (\$4,000)

02/2020 – 01/2021 Stanford Center for American Democracy Fellow (\$2,000)

01/2014 – 06/2019 Student Fellow of the German Academic Scholarship Foundation (€27,665)

SELECTED ACTIVITIES AND VOLUNTEER WORK

07/2020 – 06/2024 **Communication for Diversity**

Stanford, US

Group Member

- Advised PhD applicants from underrepresented groups and organized information events

05/2020 – 06/2024 **Stanford German Student Association**

Stanford, US

Vice President

- Co-led Transatlantic Summit on geopolitics and tech (200 participants, \$150,000 budget)
- Met with international leaders from politics and business

09/2023 – 06/2024 **Wonks and Techies at Stanford University**

01/2020 – 05/2021

Stanford, US

Group Member

- Co-authored a white paper with suggestions for the EU AI strategy
- Participated in discussions and a talk series on ethics, technology and policy

10/2019 – 09/2022 **Stanford Network of Wellbeing at Stanford University**

Stanford, US

Steering Committee Member

- Promoted student and community wellbeing by organizing large-scale events

SKILLS

Computer Skills Python, R, C++, SQL, GitHub, Markdown, LaTeX, and Mendeley

Language Skills German (native), English (fluent), French (advanced), Spanish (basic)

PROFESSIONAL SERVICE

Reviewer Nature Communications, PNAS Nexus, Humanities and Social Sciences Communications, Journal of Elections, Public Opinion & Parties, British Journal of Political Science, ACM Designing Interactive Systems (DIS)

PROFESSIONAL ASSOCIATION MEMBERSHIPS

Association for Computing Machinery (ACM), Society for Personality and Social Psychology (SPSP)