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Digitization, Privacy, and Fairness

Summary

This session will cover the economics of privacy protection and antidiscrimination law in the digital age. Technological change has dramatically lowered the costs of rapid and large-scale collection, distribution, combination, and analysis of data on individuals. This data explosion can provide tremendous welfare improvements, but it can also increase individuals' risks of having their private information revealed to outsiders or of suffering discrimination related to membership in a protected group. We will examine ways in which digitization changes underlying privacy and discrimination risks that individuals face, as well as the economic effects of regulation governing privacy and discrimination, and new challenges for rulemaking and enforcement in the digital age. Our focus will be on economic issues and approaches, but we will also discuss evolving features of the legal and technical context.

Recommended Reading

Acquisti, A., Taylor, C., & Wagman, L. (2016). The Economics of Privacy. *Journal of Economic Literature*, *54*(2), 442-92.

Cowgill, B. and Tucker, C. (2019). Economics, Fairness and Algorithmic Bias. In preparation for *Journal of Economic Perspectives*. Available at SSRN: https://ssrn.com/abstract=3361280

Additional Reading

Privacy

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Chiou, L., & Tucker, C. (2017). Search Engines and Data Retention: Implications for Privacy and Antitrust. National Bureau of Economic Research Working Paper No. w23815.

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Discrimination

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Arrow, K. J. (1998). What Has Economics to Say about Racial Discrimination? *Journal of Economic Perspectives*, *12*(2), 91-100.

Bartlett, R., Morse, A., Stanton, R., & Wallace, N. (2019). Consumer-Lending Discrimination in the FinTech Era. National Bureau of Economic Research Working Paper No. w25943.

Cowgill, B. (2018). Bias and Productivity in Humans and Algorithms: Theory and Evidence from Resume Screening. Columbia Business School Working Paper.

Edelman, B., Luca, M., & Svirsky, D. (2017). Racial Discrimination in the Sharing Economy: Evidence from a Field Experiment. *American Economic Journal: Applied Economics*, *9*(2), 1-22.

Hellman, D., (2019). Measuring Algorithmic Fairness. Virginia Law and Economics Research Paper No. 2019-15; *Virginia Law Review*, Forthcoming.

Kleinberg, J., Lakkaraju, H., Leskovec, J., Ludwig, J., & Mullainathan, S. (2018). Human Decisions and Machine Predictions. *Quarterly Journal of Economics*, *133*(1), 237-293.

Kleinberg, J., Ludwig, J., Mullainathan, S., & Rambachan, A. (2018). Algorithmic Fairness. *AEA Papers and Proceedings.* 108: 22-27.

Kroll, J. A., Barocas, S., Felten, E. W., Reidenberg, J. R., Robinson, D. G., & Yu, H. (2016). Accountable Algorithms. *University of Pennsylvania Law Review*, *165*, 633.

Lambrecht, A., & Tucker, C. (2019). Algorithmic bias? An Empirical Study of Apparent Gender-Based Discrimination in the Display of STEM Career Ads. *Management Science*, *65*(7), 2966-2981.

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Phelps, E. S. (1972). The Statistical Theory of Racism and Sexism. *American Economic Review*. 659–661.

Starr, S. B. (2014). Evidence-Based Sentencing and the Scientific Rationalization of Discrimination. *Stanford Law Review*, *66*, 803.

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