Responsible Data Science – After Workshop Resources

Textbooks, Tutorials & Slides

- Solon Barocas, Moritz Hardt, Arvind Narayanan - Fairness and machine learning - Limitations and Opportunities
- Shira Mitchell - Mirror Mirror - Reflections on Quantitative Fairness
- Suresh Venkatasubramanian - Algorithmic Fairness: Measures, Methods and Representations

Conferences & Workshops

- ACM FAT*
- FAT/ML
- "Recent Developments in Research on Fairness" Workshop
- "Wrong at the Root: Racial Bias and the Tension Between Numbers and Words in Non-Internet Data" Workshop

Toolkits

- AIF360, AIX360 - IBM
- What-if Tool - Google
- Aequitas
- responsibly
- Awesome production machine learning

Guidelines and Checklists

- Montreal Declaration for a Responsible Development of AI
- Google - Responsible AI Practices
- Google - People + AI Guidebook
- EU - Ethics Guidelines for Trustworthy AI

- [Denon](#) - An ethics checklist for data scientists
- Mitchell, M., Wu, S., Zaldivar, A., Barnes, P., Vasserman, L., Hutchinson, B., & Gebru, T. (2019, January). [Model cards for model reporting](#). In Proceedings of the Conference on Fairness, Accountability, and Transparency (pp. 220-229). ACM.
- [AI Blindspot](#)
- [The Institute for Ethical AI & Machine Learning](#)

Videos

- fast.ai - [Algorithmic Bias (NLP video 16)](#)
- Arvind Narayanan - ACM FAT* 2018 - [21 Fairness Definitions and their Politics](#)
- Solon Barocas and Moritz Hardt - NIPS2017 - [Tutorial on Fairness in Machine Learning](#)

Technology – Is it the Solution?

- Baumer, E. P., & Silberman, M. (2011, May). [When the implication is not to design (technology)](#). In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (pp. 2271-2274). ACM.
- [The problem with tech people who want to solve problems](#) by MIT Media Lab director

Courses

- [Responsible Data Science](#) - NYU - Julia Stoyanovich
- [Foundations of Fairness in ML](#) - Georgia Tech - Jamie Morgenstern
- [Human Contexts and Ethics of Data](#) - University of California, Berkeley - Cathryn Carson

Kaggle Competitions

- [Jigsaw Unintended Bias in Toxicity Classification](#)

- [Google Research - Gendered Pronoun Resolution](#)

- [Google Research - Inclusive Images Challenge](#)