

## SISSA Data Science offer 2020-21: Ethics in AI and ML course

15 November 2020

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#	Date	Lead/Guest	Topic
1	09/11/2020	Trotta (he)	Intro to topics; discussion on <a href="#">AlphaGo – the movie</a>
2	23/11/2020	Sanguinetti (TBC) (he)	Discussion on: <a href="#">Machine Learning and Bias (Kate Crawford)</a>
3	11/01/2021	Broussard (3pm, TBC) (she)	Technochauvinism
4	25/01/2021	Prunkl (11am) (she)	Responsible AI development
5	08/02/2021	Goldt (he)	Practical Data Ethics
6	22/02/2021	Infantino & Bussani (11am) (she, he)	Algorithmic Failures: A Comparative Law Approach
7	08/03/2021	Teresa Scantamburlo (11am) (she)	AI and moral machines
8	22/03/2021	Campbell (11am) (she)	The seduction of AI
9	26/04/2021	Grandi (11am) (he)	The problem of moral values and AI
10	10/05/2021	Lingel (TBC) (she)	Information inequality & feminism

Guest speakers:

- [Meredith Broussard](#) (NYU, author of “Artificial Unintelligence”) – remote
- [Carina Prunkl](#) (Oxford, Institute for the Ethics of AI) – remote
- [Marta Infantino](#) & [Mauro Bussani](#) (UniTS: “Algorithmic Failures: A Comparative Law Approach”)
- [Aifric Campbell](#) (author of “The Love Makers”, Imperial College London)
- [Giovanni Grandi](#) (UniTS; “Artificial intelligence. Anthropological analogies and ethical issues”)
- [Teresa Scantamburlo](#) (UniVE, moral machines)

Reading list:

### Books

All books are available through the SISSA library.

- 1) Bartoletti, Ivana, *An Artificial Revolution*, The Indigo Press (2019)
- 2) Broussard, Meredith, [Artificial Unintelligence: How Computers Misunderstand the World](#), MIT Press (2018)
- 3) Dignum, Virginia, “Responsible Artificial Intelligence”, Springer (2019)
- 4) Eubanks, Virginia, “Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor”, St Martin’s Press (2018).
- 5) Pasquale, Frank, “The Black Box Society”, Harvard University Press (2016)

- 6) Veliz, Carissa, "Privacy is Power: Why and How You Should Take Back Control of Your Data, Transworld Publishers (2020).

#### Papers and reports

- 1) Association for Progressive Communication, [Joint Civil Society Statement](#), July 2020.
- 2) Brooks, Rodney, "[The seven deadly sins of AI predictions](#)", MIT Technology Review, Oct 2017
- 3) Buolamwini, Joy & Gebru, Timnit. 2018. *Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification*, in *Proceedings of the 1st Conference on Fairness, Accountability and Transparency*, A.F. Sorelle and W. Christo, Editors. 2018, PMLR: Proceedings of Machine Learning Research. p. 77--91.
- 4) Campolo, Alexander & Crawford, Kate. [Enchanted Determinism: Power without Responsibility in Artificial Intelligence](#), ESTS Journal, 6 (2020).
- 5) Crawford, Kate et al. "[AI Now 2019 Report](#)". New York: AI Now Institute, 2019.
- 6) Crawford, Kate, "[Halt the use of facial-recognition technology until it is regulated](#)", Nature 572, 565 (2019).
- 7) Floridi, L., & Cowls, [A Unified Framework of Five Principles for AI in Society](#). Harvard Data Science Review, 1(1) (2019)
- 8) Lingel, Jessa & Crawford, Kate. 2020. *Alexa, Tell me about your mother. The History of the Secretary and the End of Secrecy*. Catalyst, 2020. 6(1).
- 9) Turing, Alan M., 1947, '[Lecture to the London Mathematical Society on 20 February 1947](#)', in: The Collected Works of A.M. Turing. Volume 1: Mechanical Intelligence, D.C. Ince (ed.), Amsterdam: North-Holland, 1992.
- 10) Zook M, Barocas S, boyd d, Crawford K, Keller E, Gangadharan SP, et al. (2017), "[Ten simple rules for responsible big data research](#)". PLoS Comput Biol 13(3): e1005399.

#### Blogs and online

- 1) Angwin, Julia & Larson, Jeff & Mattu, Surya & Kirchner, Lauren. 2016. *Machine Bias*. ProPublica, May 23, 2016 [online](#).
- 2) Crawford, Kate, [Machine Learning and Bias](#), online (part of *You and AI* series, video)
- 3) Crawford, Kate and Joler, Vladan. 2018. *Anatomy of an AI System: The Amazon Echo As An Anatomical Map of Human Labor, Data and Planetary Resources*, AI Now Institute and Share Lab (September 7, 2018), <https://anatomyof.ai>
- 4) Christie, Lacey-Jade, [Instagram censored one of these photos but not the other. We must ask why](#), The Guardian, Oct 19<sup>th</sup> 2020.
- 5) Dwork, Cinthya, [Making machines play fair](#), online (part of *You and AI* series, video)
- 6) Fossheim, Sarah L, "[Thoughts on Genderify, gender discrimination, transphobia, and \(un\)ethical AI.](#)", blogpost.
- 7) Kohs, Greg (director). 2017. [AlphaGo – the movie](#). Online
- 8) Miley, Leslie. 2015. *Thoughts on Diversity Part 2. Why Diversity is Difficult*, Nov 3<sup>rd</sup> 2015, [online](#)
- 9) Motzkin, Elhanan & Searle, John, "[Artificial Intelligence and the Chinese Room: An Exchange](#)", The New York Review, Feb 16<sup>th</sup> 1989.
- 10) Pasquale, Frank, '[Machines set loose to slaughter](#)': the dangerous rise of military AI, The Guardian, Oct 15<sup>th</sup> 2020.

- 11) Pasquale, Frank, "How Big Data Affects Our Lives", RSA talk ([online](#))
- 12) Simonite, Tom, 2019. *Who's listening when you talk to your Google assistant?* Wired, Oct 7<sup>th</sup> 2019. [Online](#).