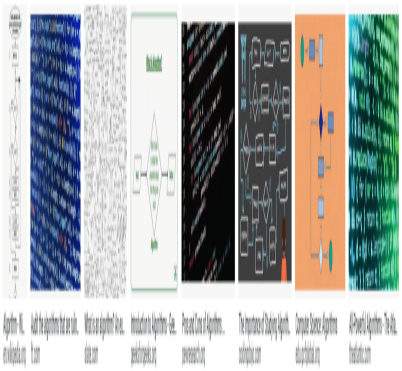

Algorithms and ethics

Description

Iâ??ve noticed amongst some digital scholars and critics a renewed interest in *algorithms*, e.g. people worry that Facebookâ??s â??algorithmâ?• skews what we read online towards the controversial and hence colours peopleâ??s politics. The concern is mainly over algorithms that â??learnâ?• from large amounts of data about us â?? in other words *machine learning algorithms*. A reading of Louise Amooreâ??s book *Cloud Ethics: Algorithms and the Attributes of Ourselves and Others* leads me to reflect again on the relationship between ethics and digital systems. I think the political and ethical challenges posed by machine learning algorithms extends to every kind of algorithm.

Algorithms everywhere

Algorithms are precise and repeatable procedures for accomplishing a computable task. An algorithm is a component of a computer program directed at a particular subtask and with an identifiable logic. So there are well known algorithms for searching a text file or database for the occurrence of a particular word, and algorithms for compiling and sorting lists of words, or processing decision trees.

Itâ??s a commonplace to remark that algorithms are typically â??hidden.â?• They are â??black boxes,â?• the content of which may be known only to the author of the algorithm. In fact, computer programs are frequently made up of algorithms drawn from libraries of other algorithms, some of which are specific to the operating system or the brand of microchip the computer program is running on. In so far as â??algorithmâ?• serves as a useful term to describe what happens in digital systems, algorithms are combined, configured, nested and are transparent and visible to varying degrees and for different human actors in their development and deployment.

There are algorithms that surreptitiously process mouse clicks, screen attention, and flows of social media data. Other algorithms activate the pixels on a display screen to form text and images, open and close files in response to mouse clicks, manage and transmit bit strings through networks and perform countless benign operations that any computer user is unlikely to know or care about.

Bit values

Algorithms and their combinations inevitably embody values, which is to say they discriminate. This is usual for any technology. As we discovered with a growing concern about accessibility in architecture, the width, swing, threshold, and opener of the ubiquitous and innocuous doorway could be a means of including and excluding people who would otherwise need to use the door. There was a hidden value system in play behind the design practices many would otherwise take for granted. So too, the design of a smartphone assumes a certain dexterity and visual acuity that able bodied designers take for granted. Interaction design also assumes certain value systems grounded in assumptions about money, consumption practices, communication, sociability, etc.

Who is responsible, and therefore accountable, for what an algorithm does? Who feeds the values into the design of an algorithm? In the case of a building design there are many â??authors,â?• secreted within the value systems of manufacturers, suppliers, consultants, owners, regulators and financiers. So too there are many authors of a typical computer program. In the words of Amoore,

> â??the algorithm already presents itself as an ethicopolitical arrangement of values, assumptions, and propositions about the worldâ?• (6).

This multi-author view informs her account of â??algorithmic ethicsâ?• (109). We want to find the culprit, the human agent responsible for biases, errors and inequities we encounter online, and yet responsibility resides with a multitude of agencies.

> â??the cloud ethics I propose here does not belong to an episteme of accountability, transparency, and legibility, but on the contrary begins with the opacity, partiality, and illegibility of all forms of giving an account, human and algorithmicâ?• (8).

By that reading, the focus on algorithm is yet another attempt to identify a person or thing that is ethically accountable. Iâ??ll keep reading. In the meantime, here are some previous posts: Emotional targeting, Perspecticide and posts tagged ethics.

Reference

- Amoore, Louise. 2020. *Cloud Ethics: Algorithms and the Attributes of Ourselves and Others*. Durham, NC: Duke University Press

Category

1. Ethics

Tags

1. algorithm
2. ethics
3. machine learning

Date Created
September 25, 2021
Author

rcoyne99