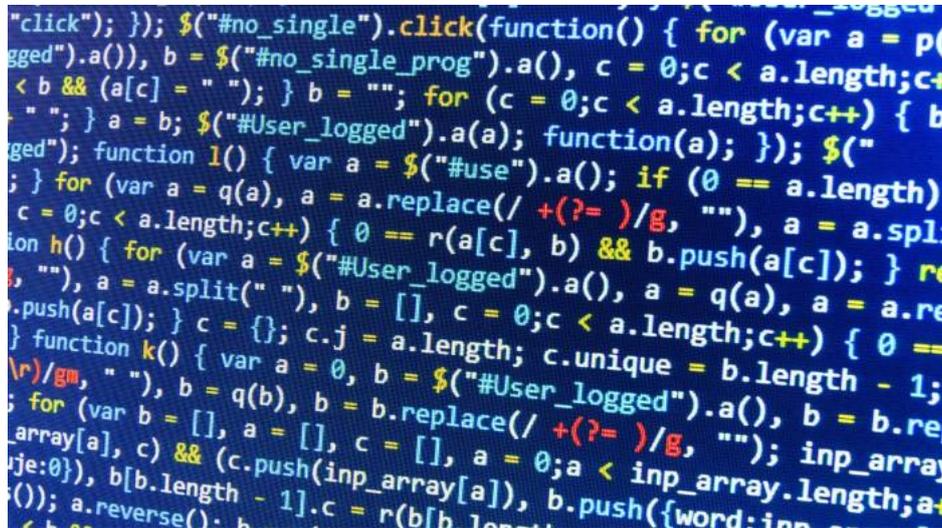


Subscribe to the FT

Opinion **Algorithmics****Audit the algorithms that are ruling our lives**

Governments should follow France and move towards algorithmic accountability

**CATHY O'NEIL**

By not independently auditing your algorithms you can remain blissfully ignorant and keep plausible deniability when it comes to negative consequences

Cathy O'Neil AN HOUR AGO

The computer scientists were stunned. They thought they had given the computer an impossible task: come up with a way for a [robot](#) spider to walk without its feet touching the ground. But the algorithm found a way past this constraint. It flipped the robot upside down so it could use its elbow joints as feet.

[Computer algorithms](#) are excellent at optimising to a well-defined definition of success, as this example shows. For many of the algorithms and applications of [artificial intelligence](#) applied to our everyday lives, however, the outcomes are far less spectacular, and success depends on who is asking.

In cases where entire subsections of society care about the result, such as with the growing field of facial recognition or in prison sentencing, algorithms have been proved to provide inaccurate and biased results. As artificial intelligence finds its way into more and more critical areas of our society, this is increasingly becoming a problem.

While Europe tries to play catch-up with the US and China in terms of AI research and development, it also understands the risks and [ethical pitfalls](#) of artificial intelligence, in particular with regard to errors made by algorithms or biased decisions. The General Data Protection Regulation, which came into force at the end of May, requires data controllers using algorithms for automated decision-making to explain the logic of that decision-making. Tucked away in [recital 71](#) of the GDPR there is even a requirement to use “appropriate mathematical or statistical procedures” to avoid or reduce risk resulting from errors or inaccuracies.

It remains to be seen how these requirements will be enforced, but algorithmic accountability, including the auditing of algorithms, seems to be embraced by the EU as a way to avoid the problems associated with bad AI decision-making.

In France, the administration of Emmanuel Macron has announced that all algorithms developed for government use will be made publicly available, so that society at large can verify their correct application.

Is publishing algorithms a solution for all forms and uses of AI? Theoretically yes, but there are obvious practical drawbacks — not everyone can understand code, after all. Moreover, both businesses and governments do not seem very willing to publish algorithms, the data used to train them or the inferences made from the data.

The reasons for this are straightforward. First of all, exposing your algorithms may destroy your competitive advantage. Furthermore, for the people who are tech savvy, publishing the algorithm might allow them to understand the decision-making process in detail, thus allowing them effectively to game the system.

Another reason for the push back is that exposure of the algorithm might lead to inconvenient truths about the effectiveness and accuracy of the decision-making process. By not independently auditing your algorithms you can remain blissfully ignorant and keep plausible deniability when it comes to negative consequences.

While the radical openness promoted by France might be a bridge too far for algorithmic accountability, the case for independent auditing of algorithms is clear. In setting up an AI strategy for Europe, algorithmic accountability or responsibility should be a key element. Government and business must be able to prove they have thoroughly tested and externally vetted their application of AI before they release it on society.

It is one thing to be surprised by an algorithm coming up with a novel solution to a theoretical problem. It is quite another to be surprised when an algorithm inadvertently destroys someone's life through bad decision-making.

*The writer is author of 'Weapons of Math Destruction'. Bart Schermer of Considerati also contributed*

[Copyright](#) The Financial Times Limited 2018. All rights reserved.

### **Latest on Algorithmics**