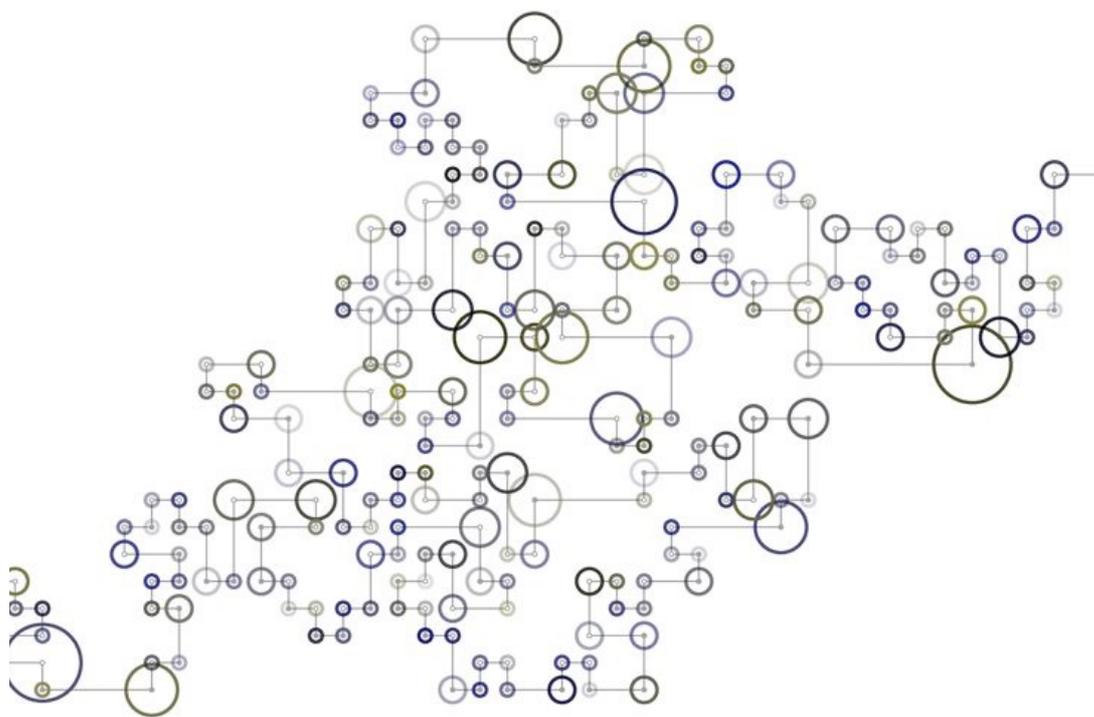


# ALGORITHMIC GOVERNANCE



Friday 18  
March 2016  
9.00 – 17.00

CA110  
Cairnes Building  
NUI Galway

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The past decade has seen an explosion in big data analytics and the use of algorithm-based systems to assist, supplement, or replace human decision-making. This is true in private industry and in public governance. It includes, for example, the use of algorithms in healthcare policy and treatment, in identifying potential tax cheats, and in stopping terrorist plotters. Such systems are attractive in light of the increasing complexity and interconnectedness of society; the general ubiquity and efficiency of ‘smart’ technology, sometimes known as the ‘Internet of Things’; and the cutbacks to government services post-2008.

This trend towards algorithmic governance poses a number of unique challenges to effective and legitimate public-bureaucratic decision-making. Although many are already concerned about the threat to privacy, there is more at stake in the rise of algorithmic governance than this right alone. Algorithms are step-by-step computer-coded instructions for taking some input (e.g. tax return/financial data), processing it, and converting it into an output (e.g. recommendation for audit). When algorithms are used to supplement or replace public decision-making, political values and policies have to be translated into computer code. The coders and designers are given a set of instructions (a project ‘spec’) to guide them in this process, but such project specs are often vague and underspecified. Programmers exercise considerable autonomy when translating these requirements into code. The difficulty is that most programmers are unaware of the values and biases that can feed into this process and fail to consider how those values and biases can manifest themselves in practice, invisibly undermining fundamental rights. This is compounded by the fact that ethics and law are not part of the training of most programmers. Indeed, many view the technology as a value-neutral tool. They consequently ignore the ethical ‘gap’ between policy and code. This workshop will bring together an interdisciplinary group of scholars and experts to address the ethical gap between policy and code.



Whitaker  
Institute



Technology and  
Governance  
Cluster

# WORKSHOP SCHEDULE

9.00 Registration

9.15 **Panel 1:**  
*Perspectives on  
Algorithmic  
Governance*

10.45 Break

11.00 **Panel 2:**  
*Algorithmic  
Governance and  
the State*

12.30 Lunch  
(Friars)

1.30 **Panel 3:**  
*Algorithmic  
Governance in  
Practice*

15.00 Break

15.15 **IdeaWriting**

17.00 Close

## *Panel 1: Perspectives on Algorithmic Governance*

Professor Rob Kitchin (Maynooth), 'Making Sense of Algorithms'

Professor Willie Golden (NUI Galway), 'Information Systems Perspectives on Algorithmic Governance'

Dr Kalpana Shankar (UCD), 'Algorithmic Governance – and the Death of Governance?'

Professor John Morison (QUB), 'Algorithmic Governmentality'

## *Panel 2: Algorithmic Governance and the State*

Dr Brendan Flynn (NUI Galway), 'When Big Data Meets Artificial Intelligence will Governance by Algorithm be More or Less Likely to Go to War?'

Niall O'Brolchain (Insight Centre), 'The Open Government Initiative'

Dr Maria Murphy (Maynooth), 'Algorithmic Surveillance: True Negatives'

Professor Dag Weise Schartum (University of Oslo), 'Transformation of Law into Algorithm'

## *Panel 3: Algorithmic Governance in Practice*

Professor Burkhard Schafer (Edinburgh), 'Exhibit A - Algorithms as Evidence in Legal Fact Finding'

Dr Aisling de Paor (DCU), 'Algorithmic Governance and Genetic Information'

Heike Felzman (NUI Galway), 'The Imputation of Mental Health from Social Media Contributions'

Anthony Behan (IBM), 'Ad Tech, Big Data and Prediction Markets: The Value of Probability'

Professor Muki Haklay (UCL), 'Algorithmic Governance in Environmental Information (or How Technophilia Shapes Environmental Democracy)'

## **Workshop Organisers:**

**Dr John Danaher**

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