

Nordic Centre for Security Technologies and Societal Values



# DATA, SECURITY, VALUES: Vocations and Visions of Data Analysis

10 - 11 December 2018, Peace Research Institute Oslo, Hausmanns gate 3

The annual NordSTEVA conference is organized by Mareile Kaufmann (PRIO) and Kristoffer Lidén (PRIO)

Data analysis can have many vocations and visions. Coding, programming and algorithmically interpreting data is informed by the concepts, ideas, values and affordances of the technologies and people that engage with data. Even if the word data means "given", information becomes socially and politically imbued as soon as it is selected and categorized to make it available for analysis. Such insights are no longer only subject of academic critique, but the normativity of data analysis has by now become integrated into public discourses. In fact, the value of data has created a new market for moral entrepreneurs, who re-frame data analysis as a tool for moral engineering and security politics. At this conference we explore how values, ideas and concepts are not only necessarily embedded in data analysis, but also in what way they are productive and co-create society. We discuss the relationship between data analysis, ideas and values by looking at the workings of digital security technologies, data security policies or the security politics of data.

# Roundtable Discussion

### Dilemma Dialogue on the Everyday Use of Data in Security Authorities

with representatives from *The Norwegian Directorate for Civil Protection* (DSB), *Ministry of Justice, The Norwegian National Security Authority* (NSM) and the *Police Security Services* (PST)

# Key Notes

Miguel Sicart, Associate Professor, IT University Copenhagen

Playing Data: Understanding the Ludic in the Information Age

Katja de Vries, Postdoctoral Researcher, IT University Copenhagen

The Coexistence of Humans and Algorithmic Machines

Susanne Krasmann, Professor, Hamburg University

The Secret of Algorithms: On Transparency, Truth and the Political

Breakfast and Lunch will be served. Please register your attendance at: https://www.prio.org/Events/Event/?x=8674

# Program

#### 10. December

- 12:00 13:30 Playing Data: Understanding the Ludic in the Information Age Miguel Sicart
- 13:30 15:20 The Many Visions of Data Analysis Chair: Trine V. Berling
  - Is Social Media Intelligence Private? Privacy in Public and the Nature of Social Media Intelligence – Kira Vrist Rønn (University College Copenhagen), Sille Obelitz Søe (University of Copenhagen)
  - Mathematical Values in Data Science: Three conjectures to explain mathwashing *Patrick Allo (Vrije Universiteit Brussel)*
  - Emotional Data : Investigating the implications of affective computing and emotion AI from digital humanities perspective  *Thomas Bjørnsten (Aarhus University)*
  - Bad Data: Forms and sources of failed "pre-algorithmic" data processing Gemma Galdon Clavell (Eticas Research and Consulting), Mariano Zamorano (Eticas Research and Consulting)
  - Algorithms in the New Digital Media Landscape: Friend or foe? *Lene Pettersen (Høyskolen Kristiania), Bente Kalsnes (OsloMet)*
- 15:20 15:40 Coffee break
- 15:40 16:45 Dilemma Dialogue on the Everyday Use of Data in Security Authorities
- 16:45 17:00 Break

15:40 – 16:45 The Coexistence of Humans and Algorithmic Machines - Katja de Vries

#### 11. December

- 08:30 10:00 The Secret of Algorithms: On Transparency, Truth and the Political Susanne Krasmann
- 10:00 11:30 Data Analysis and Ideology Chair: Mark Rhinard
  - Making Wearables in Aid: Bodies, data and gifts Kristin Bergtora Sandvik (PRIO)
  - Overt and Covert Chinese Internet-Control Practices Juha Vuori (University of Tampere)
  - Addressing Psychological Manipulation During Democratic Practices: How virtues, rights and technologies can promote accountable news distribution for voters on social media *Karolina La Fors (Leiden University)*
  - Machine Learning as Tool for Pro-Poor Development: A case study Michael Nagenborg (University of Twente), Monika Kuffer (University of Twente), Karin Pfeffer, (University of Twente)
  - Scientific Rationalism versus Disaster Discourses: How Sweden and Denmark process nuclear knowledge data Trine V. Berling (University of Copenhagen)
- 11:30 12:00 Coffee break
- 12:00-13:00 The Commercial Logics of Data Analysis Chair: Karen Lund Pettersen
  - Digital latrogenesis and Workplace Marginalization: Some ethical issues involving self-tracking medical technologies *Jo-Ann Oravec (University of Wisconsin-Whitewater)*
  - Securing the Cyber-Rationales of Economization and Securitization in the Governance of Digital Technologies *Carola Westermeier (Justus-Liebig-University Giessen)*
  - The Role of Commercial Actors in the War Against Radicalization (University of Oslo)
- 13:00-13:15 Closing remarks

# **Key Notes**

# Playing Data: Understanding the Ludic in the Information Age

## Miguel Sicart, Associate Professor at the Center for Computer Game Research, IT University Copenhagen

Computers have significantly affected the economy and culture of post-industrial societies. We are living an information revolution where all kinds of data are produced and processes by ubiquitous computers. This Information Age is also a ludic era: from the growth of videogames as major economic and cultural industries, to phenomena like gamification, this century is being defined by the way it plays with computers. In this talk, I appropriate Johan Huizinga's Homo Ludens concept (Huizinga, 1938) to argue that at the heart of the information age there is a play drive that shapes and helps define computational culture. By extending Huizinga's work with concepts from the Philosophy of Information (Floridi, 2013), Postphenomenology (Verbeek, 2005), and Agential Realism (Barad, 2007), I will argue that understanding the ludic drive in computational culture allows us to draw relevant insights from different phenomena, from videogames to gamification, from Internet trolling to e-sports and the quantified self.

## The coexistence of Humans and Algorithmic Machines

### Katja de Vries, Postdoctoral Researcher, Business IT Department, IT University Copenhagen

Machine Learning (ML) applications shape, and are shaped by, human values. In the last decade classificatory models have become the most widely applied type of ML. However, since the invention of Generative Adverserial Networks (GANs) in 2014, the field of generative ML is likely to become equally prolific in the years to come. GANs can generate convincing fakes of video footage, pictures, graphics, DNA strings, etc. Some have called their capacity to mimic and recreate any informational pattern 'machine imagination'. In this paper I explore what this new ML technique means in terms of how machines and humans co-create and co-organize life. I will discuss three important aspects of GANs. Firstly, what does it mean that GANs are trained on unlabelled data? Does that make them less prone to human bias? Secondly, what are appropriate success and optimization criteria for GANs? In classificatory ML prediction accuracy is the most common measure of success. GANs lack such an obvious criterion: assessing how good a creation is, is as difficult as assessing the quality of art produced by a human artist. Thirdly, how do GANs push the traditional opposition between fact and fiction out of joint? For example, GANs could offer a solution against unrepresentative datasets by their capacity of generating synthetic data. While a synthetically adjusted dataset could be more representative of 'reality' than a set merely consisting of 'real' data, this practice would challenge the crucial scientific principle that data should not be fabricated.

### The Secret of Algorithms: On transparency, Truth and the Political

# Susanne Krasmann, Professor at the Faculty of Economy and Social Sciences (Criminology) Hamburg University

The future of big data and algorithms is often associated with a double imagery: on the one hand, algorithms are said to operate in the black box of the computer, invisible and incomprehensible to us, as if assuming their own agency; on the other hand, they raise the hope that society be rendered transparent and thus governable, to the extent that social science might become obsolete. Yet, algorithms do not just represent reality, they create a particular reality. In a way, they seem to be smarter than us, though at the cost that they also reduce "our" world according to their protoco-logics. The lecture analyses the different style of reasoning algorithms deploy, compared to human sense making. Algorithms, it is argued, have no secrets, but they may be seductive: once we attribute them the ability to speak the truth and once we concede them the right to decide on the fate of ourselves, or others. Instead of being afraid of algorithms' anonymous power, we should recognize their skills for what they are – while making ourselves being aware of the political implications.