

Distinguished Lectures Spring 2019



Colorado State University's Information Science and Technology Center (ISTeC) presents two lectures by

Dr. David Berry

Professor of Digital Humanities (Media and Film)
School of Media, Film and Music
University of Sussex

ISTeC Distinguished Lecture

In conjunction with the College of Liberal Arts, Department of Computer Science, and Department of Electrical and Computer Engineering Seminar Series

"The Data Intensive University: The Idea of a University in a Digital Age"

Monday, March 25, 2019
Reception with refreshments: 10:30 a.m.
Lecture: 11:00 a.m.-12:00 noon
Morgan Library Event Hall

College of Liberal Arts, Department of Computer Science, and Department of Electrical and Computer Engineering Seminar Series Sponsored by ISTeC

"Explainability and the Data Intensive University"

Tuesday, March 26, 2018
Reception 3:30 p.m.
Lecture: 4:00-5:00 p.m.
BSB A101

Abstracts

The Data Intensive University: The Idea of a University in a Digital Age

In a digital age the university needs to communicate humanistic values and its contribution to public culture more than ever. The university is particularly important for continuing to ask the question: what is a life worth living? Today we live within a horizon of interpretability determined in large part by the capture of data by algorithms which overtake our lives and thoughts. This is a world that relies upon automation by computation and the manipulation of data using sophisticated software. It is a data-intensive world built on the economic realisation of an increasingly data-intensive scientific milieu. However, this has a number of darker aspects, from extensive value-extraction of private data and the emergence of new forms of digital propaganda, to the creation of an economy of imperious digital monopolies. We need to ask key questions about who, what, why, when, where, and how in relation to digital technologies, but we also need to develop these questions in relation to humanistic inquiry and being-human. For me, a critical site for both understanding these issues and for starting the process of responding to them is the university. Not just the university we have, but the university we must have, the university we have to build – I argue that we need to rediscover a philosophy of the university but also develop a set of critical practices for thinking both with and about computation. I have started to describe the new emergent form of the university as a data-intensive university, one that is increasingly constructed by a data-centric economy and polity. I argue that a number of shifting social, political and economic forces call for a response in the form of a new distinctive role for the university. But this also raises new questions for the university: How do the academic disciplines respond, what are the implications for their teaching and research? What are the implications for the wider university and its capacity to offer critique? Indeed, where is the centre of the university in a data-intensive age and what thereby is the compass by which a university is able to justify its direction? In this talk I will explore these issues and the ways forward for meeting the challenges.

Explainability and the Data Intensive University

In the UK, the Data Protection Act 2018 has come into force, which was the enabling legislation for the European GDPR (General Data Protection Regulation). It has been argued that this creates a new right in relation to automated algorithmic systems that requires the "controller" of the algorithm to supply an explanation of how a decision was made to the user (or "data subject") – the social right to explanation. This right has come to be known as the problem of explainability for artificial intelligence research, or Explainable Artificial Intelligence (XAI). In this paper I want to explore the implications of this for the university, and particularly the concept of explainability it gives rise to. One of the key drivers for the attention given to explainability has been a wider public unease with the perceived bias of algorithms in everyday life, the rise in automated decision processes (ADP) and the calls for accountability in these systems. Computation combined with artificial intelligence and machine learning has raised interesting questions about authorship, authenticity, post-human futures, creativity and AI-driven systems. Many of these debates foreground the question of the human, whether as post-human technologies or as challenges to the privileged status of humans as intelligent, thinking or creative beings. These implications are increasingly discussed in the media and in politics, particularly in relation to a future dominated by technologies which will have huge social consequences. This is reflected in an anxiety felt by those who fear the potential for bias to infiltrate machine decision-making systems once humans are removed from the equation. It is in this context that public disquiet has risen in relation the perceived unfairness of these, often unaccountable, algorithmic systems. The discussion I wish to open in this paper is largely speculative. It seems to me that we have two issues that are interesting to consider. Firstly, that the GDPR might require universities to have or to be "explainable" in some sense and therefore subject to the same data protection regime as other algorithms (perhaps as Explainable Universities – xU). This may mean they are required to provide their internal processing descriptions (e.g. automated grading/plagiarism checking) under this "right to explanation". Secondly, this interpretation problem faced by algorithm programmers seems to me exactly the kind of interpretative questions that casts light on the computerization of the university. What exactly are universities for? How can we explain this to new generations or to the wider public? Perhaps explainability offers a critical site to reflect on these questions?

Speaker Biography

Dr. Berry researches the theoretical and medium-specific challenges of understanding digital and computational media, particularly algorithms, software and code. His work draws on digital humanities, critical theory, political economy, social theory, software studies, and the philosophy of technology. As Professor of Digital Humanities, he is particularly interested in how computation is being incorporated into arts and humanities and social science practice. His new work examines the historical and philosophical genealogies of the notion of an "Idea of a University" and is funded by the British Academy.

To arrange a meeting with the speaker, please contact Prof. Michael Carolan, Michael.Carolan@ColoState.EDU or Prof. Jonathan Carlyon, Jonathan.Carlyon@ColoState.EDU.

Upcoming Distinguished Lectures

April 15

Augmented Reality as the Future of Personal Computing

11 a.m.-12 noon



Morgan Library Event Hall
Dr. Doug Bowman

April 22

Towards Semantic Adversarial Examples

11 a.m.-12 noon



Morgan Library Event Hall
Dr. Somesh Jha

April 29

Internet Beyond Packets: Network Neutrality, Rural Broadband, Spectrum and Access for People with Disabilities

11 a.m.-12 noon



Morgan Library Event Hall
Dr. Henning Schulzrinne