



Roundtable on Artificial Intelligence and Employment

Memorial Room
Jesus College, Oxford

November 26-27, 2018

What effects will advances in Artificial Intelligence (AI) have on employment? This question looms large in discussions about AI. The public debate focusses on likely effects of AI on human workers: AI systems threaten to eliminate some jobs altogether, and to dramatically alter the nature of other jobs, as parts of existing jobs are automated. However, as AI systems enter the workplace, AI may also have larger-scale effects on whole professions, and the function they perform in society, as well as on individual workers. To examine these effects, it is useful to see case studies of several professions side by side.

In this roundtable, we will hear from experts in several professions that are in the process of being disrupted by AI. Our focus is, loosely speaking, on 'Professions' (with a capital P), such as Law, Journalism, Education and Management, whose practice is instrumental in regulating and organising our society. We are equally interested in the effects of AI on human workers in these professions, and its effects on the professions themselves. Our focus in the roundtable is on what changes to policy and regulation (if any) might be needed to respond to both types of effects. AI technologies pose fascinating legal, practical and ethical challenges, which require interdisciplinary solutions.

OBJECTIVE

The roundtable seeks to identify trends and issues in AI and employment and to understand emerging responses, including what, if any, policy or regulatory responses may be needed. To achieve this objective, participants will be invited from academic institutions, industry, civil society, professional bodies and the technical community to discuss the likely impacts of AI on professions and implications for employment law.

For example, impacts may include technological unemployment (the prospect that people will lose their jobs to intelligent machines), human and AI job sharing, and new forms of employment. These raise many legal questions, such as:

- Will replacing human employees with AI erode the social dimension of professions such as law, journalism and education? If so, should this dimension be safeguarded?
- Might new legal mechanisms for defining corporate rights and obligations be needed? Should AI systems be regarded as 'legal persons' for some purposes?
- How would AI related job losses fit within existing categories of redundancy and unfair dismissal? Are employment law changes needed to cater for this scenario?

FORMAT

This is a two-day closed workshop. Day 1 speakers will focus on the likely impact of AI on the professions including law, medicine, education, journalism, law enforcement and company management. Day 2 speakers will focus on issues that cut across professions, for example, recruitment, redundancy, human oversight of AI, transparency and liability for AI decision-making. Participants will be encouraged to share research and pose questions.

Project Authors:

Professor James MacLaurin, Associate Professors Colin Gavaghan and Alistair Knott, Dr John Zerilli and Joy Liddicoat.

Contact email: Joy.Liddicoat@otago.ac.nz

Monday 26 November 2018

8.30 - 9am Registration, welcome tea and coffee on arrival

Welcome and orientation [Project Authors]	[9.00 - 9.15]
The legal profession	
Christina Blacklaws	[9.15 - 9.35]
<i>President, The England and Wales Law Society</i>	
Martin Davidson, <i>ThoughtRiver</i>	[9.35 - 9.55]
Discussion	[10.00 - 11am]
Tea and Coffee	
11.30 - 12.30pm	
Journalism	
Gary Rogers	[11.30 - 11.45]
<i>RadarAI</i>	
Stefan Hall	[11.45 - 12.00]
<i>World Economic Forum</i>	
Discussion	[12.00 - 12.30]
Lunch (provided)	
1.30 - 3 pm	
Education	
Kaska Porayska-Pomsta	[1.30 - 1.50]
<i>Academic Fellow, UCL Institute of Education</i>	
Elliot Jones	[1.50 - 2.10]
<i>Demos</i>	
Discussion	[2.15 - 3pm]
Tea and coffee	
3.30 - 5.00 pm	
Managers and Directors	
Jeremias Prassl	[3.30 - 3.50]
<i>Associate Professor of Law, Magdalen College, Oxford</i>	
Alan Dignam	[3.50 - 4.10]
<i>Professor of Law, Queen Mary University</i>	
Discussion	[4.10 - 4.45 pm]
Summary and close	[4.45 - 5pm]

Tuesday 27 November 2018

8.30 - 9am Welcome tea and coffee on arrival

9am - 11 am

Discussion points from Day 1, orientation for Day 2 [9.00 - 9.15]

AI, the law, and the future of work

Kai Hsin-Hung [9.15 - 9.30]

International Training Centre of the International Labour Organisation

Chinchih Chen [9.45 - 10.15]

Oxford Martin School

Discussion [10.15 - 11am]

Tea and Coffee

11.30 - 12.30pm

Labour issues and regulatory implications

Ken Dau-Schmidt [11.30 - 11.45]

Professor, Indiana University

Becky Faith [11.45 - 12.00]

Institute for Development Studies

Discussion [12.00 - 12.30]

Lunch (provided)

1.30 - 3 pm

Regulatory and public policy issues

David Souter [1.30 - 1.45]

ICT Development Associates

Alex Comninos [1.45 - 2.00]

Vous Research

Ana Luisa Surtes [2.00 - 2.20]

Discussion [2.20 - 3.00pm]

Tea and coffee

3.30 - 5.00 pm

Thematic Discussion [3.30 - 4.45 pm]

Summary and close [4.45 - 5pm]

Participants

Christina Blacklaws is President of The Law Society of England and Wales. Christina studied Jurisprudence at Oxford and qualified as a solicitor in 1991. She has developed and managed law firms including a virtual law firm and setting up the first ABS with the Co-op. More recently, she was Director of Innovation at a top 100 firm. She holds a range of public appointments including member of the Family Justice Council, trustee of LawWorks, member of the Judicial Diversity Forum and chair of the government's Lawtech Delivery Panel. Christina is passionate about diversity and inclusion, technology and access to justice and uses every opportunity to advocate and progress positive change in these areas. Christina chairs the Law Society's Legal Technology Policy Commission. She is heavily involved in the technological issues relating to supra-national legislative and regulatory frameworks as well as the need to demystify lawtech and empower all lawyers to embrace relevant technology. Christina leads on the Society's relationship with Barclays to develop lawtech incubators. Christina represents the Women Lawyers Division and sits on the Thomson Reuters Women in Law Advisory Board and on the advisory boards for women in law (Legal Week) and for LawSmart (a social mobility collective).

Dr J. Scott Brennen is a communication scholar and a postdoctoral research fellow at the Reuters Institute for the Study of Journalism and the Oxford Internet Institute. His work investigates how changing media structures, cultures, and technologies are shaping the production and circulation of scientific information and scientific misinformation. He currently works on the Oxford Martin Programme on Misinformation, Science, and Media, which examines the interplay between scientific misinformation, news coverage, and social media platforms for the public understanding of science and technological innovation.

Corinne Cath is a doctoral student at the Oxford Internet Institute. Her research focuses on the politics and ethics of Internet governance and the management of the Internet's infrastructure. Her other research interests include the impact of Internet policy, technology, and regulation on public interest issues like human rights, civil liberties, and social justice. Her most recent research examines the ethical impact of policy proposals regulating artificial intelligence, the influence of changes in European politics on the technical stability of the Internet, and the responsibility of the technical community towards human rights. She is part of the inaugural cohort of students that received a doctoral studentship from the Alan Turing Institute, the UK's national institute for data science.

Chinchih Chen is a Postdoctoral Researcher of the Oxford Martin Programme on Technology and Employment at the Oxford Martin School. She obtained her PhD at London School of Economics and Political Science in 2014. Her primary areas of specialisation are economic geography and applied microeconometrics. Secondary fields are international trade and regional economics.

Alex Comninos (MSocSc International Relations, University of Cape Town) is an information and communications technology researcher and consultant from South Africa who has published research on various topics including artificial intelligence, human rights and the internet, internet governance, cybersecurity, intermediary liability, mobile banking, and African political economy. Alex is a member of the Association for Progressive Communications and has consulted and conducted research for the Open Technology Institute, Freedom House, the OSCE, the Assembly of Kosovo, and the World Bank. Alex is also podcaster at CYBERnyama.net. Alex is a Doctoral Candidate in the department of geography at Justus-Liebig University Giessen.

Martin Davidson is Chief Legal Intelligence Officer of ThoughtRiver, a company specialising in the pre-screening of contracts using AI. He is also Product Owner and leads the legal intelligence team that supports client adoption of the technology. Before joining ThoughtRiver in 2017, he was Head Counsel at Sky and played a leading role in developing legal operations initiatives there, including contract automation. Before joining Sky, Martin was a lawyer at international law firm Herbert Smith Freehills. Legal500 recognised him as a rising star in their GC PowerList in 2017.

Professor Alan Dignam graduated from Trinity College Dublin in 1990. He received his doctorate in 1995. He joined Queen Mary, University of London in 1998 having been a lecturer in law at Dublin City University and Sussex University. His major research interests are company law, corporate governance and the application of Constitutional Rights/Human Rights to corporations. He has written widely in domestic and international law journals on company and commercial law matters, and is the co-author with Professor John Lowry (UCL) of *Company Law* (Oxford University Press, 2008) and with David Allen of *Company Law and the Human Rights Act* (Butterworths, 2000). A full bio is available at: <http://www.law.qmul.ac.uk/staff/dignam.html>

Professor Kenneth G. Dau-Schmidt is the author of seven books and numerous articles on labour and employment law and the economic analysis of law, and frequently presents papers at academic conferences and law schools across the United States, Canada, Europe and Asia. Ken is involved in several national academic associations, was elected to the National Council of the American Association of University Professors and appointed to serve on the executive and litigation committees of that organisation. He is past chair of the Labour Law Group and chaired the Association of American Law School sections on the Economic Analysis of Law and Socio-Economics. Ken has served in various capacities on the executive committee of the AALS section on Labour and Employment Law and the Industrial Relations Research Association's section on Labour and Employment Law. He is a founder of the Midwest Law and Economics Association.

Dr. Becky Faith is a Research Fellow and Deputy Leader of the Digital and Technology cluster at the Institute of Development Studies. Becky's professional experience and research interests encompass mobile communication studies, human computer interaction and technology for social change. Becky has fifteen years' strategic and programme experience working in ICT4D and technology for human rights organisations. She developed innovative mobile advocacy programmes and training materials for activists in the global South, including the first SMS based petition. Becky served as a Director of the [Sussex Community Internet Project](#) and was on the selection committee for the Young Foundation's first [Social Innovation Camp](#). She also convenes 300 Seconds Brighton, an initiative aimed at promoting women speakers at digital and technology events.

Colin Gavaghan is an Associate Professor in the Faculty of Law at the University of Otago. He is the first director of the New Zealand Law Foundation sponsored Centre for Law and Policy in Emerging Technologies. The Centre examines the legal, ethical and policy issues around new technologies. To date, the Centre has carried out work on biotechnology, nanotechnology, information and communication technologies and AI. In addition to emerging technologies, Colin lectures and writes on medical and criminal law. He is a member of the Advisory Committee on Assisted Reproductive Technology and the Advisory Board of the International Neuroethics Network. He was an expert witness in the High Court case of *Seales v Attorney General*, and has advised members of parliament on draft legislation.- He is co-Director of the Otago AI and Society discussion group and co-principal investigator in the AI and Law in New Zealand project.

Stefan Brambilla Hall is a Project and Engagement Lead with the World Economic Forum's Media, Entertainment and Information initiative. He is responsible for projects relating to the creative economy, and leads research into the impact of digital technologies on this sector. Stefan has contributed to several of the World Economic Forum's flagship reports, including The Global Risks Report, The Inclusive Growth and Development Report and the Outlook on the Global Agenda. His work has been published by the World Economic Forum, Forbes, McKinsey, the London School of Economics and CGTN America. He holds degrees from the University of York and the London School of Economics.

Kai Hsin-Hung is an External Collaborator with the International Training Centre of the International Labour Organisation. He develops and designs curriculum and prototypes new sustainable learning solutions. His focus is innovation and knowledge synthesis of complex development challenges, including the future of work, food security, and climate change. He has broad experience in various roles in international advocacy, program management, and policy research at the International Development Research Centre and Global Affairs Canada.

Elliot Jones is a researcher at Demos. He is interested in how people communicate about long-term risks online and how technology can improve and individualise economic policy. He has previously conducted research on intergenerational fairness and trust between supporters of a political party. Elliot holds a BA in Philosophy, Politics and Economics from the University of Oxford.

Alistair Knott is an Associate Professor at the Department of Computer Science in the University of Otago, New Zealand. He studied Psychology and Philosophy at Oxford University, then took an MSc and PhD in AI at Edinburgh University. Ali has worked in AI for 25 years, focussing on models of natural language processing, human-computer dialogue and neural models of language and memory; he has published over 100 papers on these topics. He also works for the Auckland-based AI startup Soul Machines, where he is implementing the embodied model of language developed in his book *Sensorimotor Cognition and Natural Language Syntax* (MIT Press, 2012). He is co-Director of the Otago AI and Society discussion group and co-principal investigator in the AI and Law in New Zealand project.

Joy Liddicoat is a lawyer whose primary research interest is human rights and technology. Joy is an Assistant Research Fellow on the AI and Law Project. Prior to joining the Project Joy was Assistant Commissioner at the Office of the Privacy Commissioner, responsible for oversight of policy and technology research and investigations into interferences with privacy. Between 2011-2014 Joy coordinated a global campaign for the Association for Progressive Communications, working with human rights defenders in the United Nations Human Rights Council, developing Internet related curricula and publishing related research. A Human Rights Commissioner for eight years, Joy was responsible for research on women's rights, national human rights institutions and led the Commission's 2010 inquiry into the experiences of transgender people in New Zealand. Joy is Vice President of InternetNZ <https://internetnz.nz/> which is responsible for domain name policy for the country code .nz.

James Maclaurin is a Professor in the Department of Philosophy and Associate Dean for Research in Humanities at the University of Otago. His MA in biological applications of mathematical information theory is from Victoria University of Wellington and his PhD in the philosophy of science is from the Australian National University. His research focuses on the relationship between science, public policy and ethics. His books include *What is Biodiversity?* (with Kim Sterelny, University of Chicago Press) and *A New Science of Religion* (with Greg Dawes, Springer Science). He has also published on philosophical methodology and on the application of evolutionary science in economics and computer science.

James is co-Director of the Otago AI and Society discussion group and co-principal investigator in the AI and Law in New Zealand project.

Dr. Kaska Porayska-Pomsta is a Reader in Adaptive Technologies for Learning and an RCUK Academic Fellow at UCL Institute of Education. Dr. Porayska-Pomsta's research focuses on developing fully interactive, adaptive technologies through real-time learner modelling, especially in relation to learners' affect and motivation, and AI-driven interaction, including natural language and non-verbal communication. She conducts her research in the context of enhanced reality environments and within the serious games paradigm. Her research has two main aims, to provide new and effective modes of learning and teaching and to create research tools that allow researchers, teachers and practitioners to learn about learning, teaching and communication processes between humans and between humans and machines. As a linguist Dr. Porayska-Pomsta aims to understand socio-cultural as well as cognitive and affective determinants of successful communication and what constitutes success in communication. She has experience in working with children and adults, with and without special needs, in a variety of domains including social communication, affective self-regulation as well as well-defined subject domains such as physics and mathematics.

Daithí Mac Sithigh is Professor of Law and Innovation at Queen's University Belfast (Northern Ireland), and a co-investigator in Future Screens Northern Ireland, funded through the Arts and Humanities Research Council's creative economy clusters programme 2018-2022. Daithí's research interests are in law and technology (including topics such as audiovisual media law, the regulation of the video games industry, legal issues in the creative industries, and Internet infrastructure and domain names) and constitutional and administrative law. His recent monograph *Medium Law* (Routledge, 2017) explores the application of 'medium theory' (including the work of Harold Innis and Marshall McLuhan) to differences between media, and how technological definitions and associated changes have legal and regulatory consequences. He will be a co-author of a leading textbook in the field, *Information Technology Law* (Routledge), from its next edition, and has developed and taught new modules on a range of topics in media and information technology law at the Universities of East Anglia, Edinburgh, and Newcastle, before joining Belfast in 2017. In 2018 he was an Arthurs Visiting Fellow at Osgoode Hall Law School (Toronto). He is co-editor of the *Dublin University Law Journal*, a domain name dispute resolution panellist, and a serving member of the Irish Open Data Governance Board. Web: <http://go.qub.ac.uk/daithi> ; Twitter: @macsithigh

Jeremias Prassl researches and teaches in the fields of English and European constitutional law and employment law, with a particular interest in technology, innovation policy, and the future of work. He is a Fellow of [Magdalen College](#), and Deputy Director of the Institute of European and Comparative Law. Jeremias read law at Oxford, Paris, and Harvard Law School and has held visiting teaching and/or research positions including at UCL, Yale Law School, the University of Vienna, the Max Planck Institute Hamburg, Renmin Law School, and Hong Kong University.

Gary Rogers is co-founder of Urbs Media, and is Editor-in-Chief for RADAR, a new service using technology to deliver news stories to local media in the United Kingdom. He has extensive experience across the news industry, starting his career at the Reading Evening Post before holding a series of senior editor positions at the BBC and ITN.

David Souter has worked as an independent expert in ICT, Internet and public policy since 2003, when he founded the consultancy ICT Development Associates. He works at the interface between ICT/Internet and public policy, with a particular interest in development, environment, governance and rights, in Internet governance, and in the long-term impact of ICT/Internet on economy, society and culture. He has worked extensively since 2003 as a consultant to United Nations agencies including DESA, UNESCO, UNCTAD, ITU and CSTD. He was Visiting Professor in Communications Management at the University of Strathclyde from 2002 to

2012, and Visiting Senior Fellow in the Media and Communications Department at the LSE from 2009 to 2016. From 1995 to 2003, he was Chief Executive of the Commonwealth Telecommunications Organisation, one of the pioneer agencies in ICT4D during that period. His doctoral research was in African economic history, specifically the development of the labour market and its relationship with political and social change in Nigeria.

Ana Luísa Sertã is a PhD student at the University of London (Birkbeck/ UCL). Her current research investigates the potential impacts of new technologies on social reproductive labor and gender dynamics from an anthropological perspective, particularly interested in methodologies for the ethnography of domestic spaces. She holds a master's degree in Social Anthropology from the University of Sao Paulo (Brazil) and is the author of *Following Seeds: circuits and paths of Sateré-Mawé women between city and village*.

Dr John Zerilli is a philosopher and cognitive scientist in the Department of Philosophy at the University of Otago. He has published numerous articles, canvassing philosophy, cognitive science, law and political economy. His work appears in such journals as *Philosophy of Science*, *Synthese*, *Biological Theory* and *Philosophical Psychology*. He is co-author of the book *The AI Revolution: What Every Citizen Needs to Know* (MIT Press, 2019).