

THE SENATOR GEORGE J. MITCHELL INSTITUTE FOR GLOBAL PEACE, SECURITY AND JUSTICE

LEVERHULME TRUST\_\_\_\_\_

# AI, ETHICS & THE HUMAN

LINAS Conference Programme

10th May 2023

# AI, Ethics and the Human

### Conference Vision

The Leverhulme Interdisciplinary Network on Algorithmic Solutions (LINAS) hosts an annual Postgraduate Research Conference organised by a small committee of students from the LINAS cohort. Focused on a broad theme related to Al and ethics, chosen by the committee, the conference is entirely student-led.

The Annual Postgraduate Research Conference provides a platform for postgraduate students and researchers, from Queen's University Belfast and beyond, to showcase their research to a wide audience and to build networks with other interdisciplinary researchers from across the world.

This year's theme is 'AI, Ethics and the Human'. Through presentations and discussions, we will address major questions pertaining to the implications of massive-scale data processing, artificial intelligence (AI) and machine learning (ML). Al is permeating our daily lives: it extends to our socialisation with others, our job applications and even our healthcare. These algorithmic decisionmaking processes are increasingly far-reaching, and yet many remain unaware of their extent as they operate in the background of our lives. The LINAS conference seeks to discuss both this ubiquity and invisibility. Our main objective is to motivate and encourage researchers to consider and explore these Al-driven, human-technology interactions across a broad range of fields, including education, medicine, the home, borders, and wider society. *How is Al changing what it means to be human*?

### Acknowledgement

We are pleased to acknowledge that financial support for this year's conference comes from the Leverhulme Trust.

# Programme

9.00	Registration
9.20	Welcome Remarks: Prof Richard English
9.30	Panel 1 'Surveillance and Security'
10.30	Break: Tea and Coffee
10.45	LINAS Forum
11.30	Panel 2 'Robotics and Automation'
12.30	Lunch
13.30	Panel 3 'AI in Society'
15.00	Break: Tea and Coffee
15.15	Keynote Speaker: Prof Matthias Leese
16.15	Closing remarks: Prof John Morison
16.30	Close



### **Professor Matthias Leese**

We are delighted to welcome Professor Matthias Leese as our keynote speaker.

Matthias Leese is Assistant Professor for Technology and Governance at the Department of Humanities, Social and Political Sciences, ETH Zurich. His research is interested in the effects of digital technologies on social order. It pays specific attention to security organizations and their rationales and practices that are co-constituted between the technological and the social.





# **Professor Richard English**

Richard English is Director of the Mitchell Institute, and a Professor of Politics in the School of History, Anthropology, Philosophy and Politics at Queen's University. His research focuses on political violence and on nationalism. His books include the award-winning studies Armed Struggle: The History of the IRA (2003) and Irish Freedom: The History of Nationalism in Ireland (2006). He is a Fellow of the British Academy, a Member of the Royal Irish Academy, a Fellow of the Royal Society of Edinburgh, and a Fellow of the Royal Historical Society. In 2019 he was awarded the Royal Irish Academy's Gold Medal in the Social Sciences.



### **Professor John Morison**

John Morison is Professor of Jurisprudence in the School of Law at QUB. He has published widely in the areas of constitutional theory, the judiciary and the legal professions as well as new technology. He is the Coordinator of the Leverhulme Interdisciplinary Network on Algorithmic Solutions (LINAS).



# **Doctor Ciarán O'Kelly**

Dr Ciarán O'Kelly is a Senior Lecturer at the School of Law, Queen's University Belfast and coordinator of the LLM in Law and Technology. His research focuses on how the concept of accountability plays out in corporate and administrative settings. He is especially interested in the interplay of business and human rights and in how organisations conceptualise, manage and share knowledge.



# **Doctor Teresa Degenhardt**

Dr Teresa Degenhardt is a criminologist who teaches at Queen's University Belfast. She works the intersection between at criminology and international relations, focusing on issues related to processes of criminalization within the international criminalization of war; the sphere: criminalization of migrants, the uses of borders and technology to these ends. She has been a visiting scholar at the University of California, Berkeley, the Hamburg Institute for Social Research and the University of Turin.

# C H A I R B I O G R A P H I E S



### **Doctor Mike Bourne**

Dr Mike Bourne is a Reader in International Security. His work engages the connections of security and technology with a focus on technologies of violence, arms control, border control and illicit trafficking. His theoretical work within critical security studies develops new approaches oriented through new materialist, process-relational philosophies, the philosophy of technology and Science and Technology Studies. His research has engaged the development of border security technologies, the growth of automated borders, technologies of violence, and arms control and disarmament. It has been published in Security Dialogue, Contemporary Security Policy, European Security, Social Studies of Science, International Politics, Critical Studies on Security, Global Change, Peace and Security, and others.

# FOLLOW THE CONVERSATION

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# P A N E L D E T A I L S

# Panel 1: Surveillance and Security

Chair: Dr Ciarán O'Kelly

Karli Gibson	UK Bordering: An Algorithmic Hostile Environment
James Sweeney	Intelligent Voice Assistants: A Fundamental Influence on the Age of Surveillance Capitalism
Jason McKillen	Decentralised Defence: 3D Printing, Security, and the Democratisation of Weapons Manufacturing

# **Panel 2: Automation and Robotics**

Chair: Dr Teresa Degenhardt

Hugh Williams	The Responsibility Gap: A unique problem for social robots
Femi Omotoyinbo	3 Ps of Programming Morality into Killer Robots
Mauricio Figueroa	'I'm dying to talk to you': technological approaches to mitigate the risks in ghostbots

# Panel 3: Al in Society

Chair: Dr Mike Bourne

David Mark	smART attack - Examining the societal and legal implications of Al generated artistry
Stanley Simoes	AI and Core Electoral Processes: Mapping the Horizons
Samira Allioi	The use of Artificial Intelligence in the decision-making process and the right of individual application: the European Court of Human Rights
Shania Kirk	Managing the influence of EdTech companies on the UK education system
Jarlath Warner	Emergent Program Generation for Lightweight Al

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# **Chair: Tomás McInerney**

Tomás is a third year PhD student that looks at the use of artificial intelligence in the courts, focusing on the question when, if ever, is it acceptable for algorithms to make judicial decisions? The research is supervised by Professor John Morison, with whom he is working on other related projects on decision-making and AI more broadly. Away from the PhD, Tomás enjoys playing Gaelic football, following the premier league, and telling people about good films he has recently watched.



The LINAS forum has been designed to showcase some of the wide ranging, cutting edge research that is currently being undertaken by those involved with the LINAS doctoral training programme. As such we have afforded some of our doctoral scholars who are not participating in the panels today the opportunity to present their work in a short forum style presentation. We hope this provides a clearer understanding of the ideals and research themes behind this programme that will lead to opportunities and conversations around future collaboration.

# SPEAKERS

Jessica Barr	Machine learning-enhanced diagnostics of open quantum networks
Marc Elliott	Ethics of AI and the Public Sector: Addressing Fairness Concerns
Anna Montgomery	The Smart Home as a Site of Control
Katherine Pittalis	Algorithmic Relation: Malicious bots and their impact on the music industry
Joshua Weston	Machine and Algorithm-driven discovery in Big Data: Implications for Scientific Reproducibility



# **CONFERENCE ORGANISING COMMITTEE**

Karli Gibson (Chair)

Karli is in the second year of her PhD, researching the use of algorithms in UK bordering processes and addresses subsequent questions of responsibility through a material-semiotic approach.

We would also like to thank the following LINAS scholars who sat on the organising committee:

- Shania Kirk
- James Sweeney
- Anna Montgomery Joshua Weston
- David Mark

# WITH ADDITIONAL THANKS TO ...

The conference organisers would like to extend thanks to Valerie Miller, Brett Walker and the Senator George J. Mitchell Institute for Peace, Security & Justice for their invaluable guidance throughout the conference planning process.

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