

Algorithmic Justice Symposium



Friday 14 July 2023

9.15am - 5.00pm

**University of Newcastle, Sydney Campus, 55 Elizabeth Street Sydney
Room ELI-115**

**This Symposium is supported by the Older Persons Legal Clinic at the University of Newcastle
Legal Centre**



**THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA**

**CENTRE FOR LAW
AND SOCIAL JUSTICE**

Program Overview

Each presentation will be approximately 20 minutes. Each session includes a 5 – 10 minute Q&A.

9:00am – 9.15am

Registration

9.15am – 9.30am

Acknowledgment of Country & Introductory Comments – *Justice – Dystopia or opportunity?*
Tania Sourdin

9.30am – 10.15am

Keynote, Emeritus Professor Terry Carney, University of Sydney, *'Learning from Robodebt: An Algorithmic Justice Thought Experiment?'*

Session One: 10.15am – 11.20am

Risk Assessment & AI Regulation

Melissa Hamilton, University of Surrey (UK), *Algorithms Driving Criminal Justice Decisions* (online)

Eliezer Sanchez-Lasaballett, University of Newcastle, *Algorithmic Justice and Regulating Black Box AI*

Andrea Matus, Legal Practitioner, Olivia Bakyew, Senior Government Advisor & Carol Hullin, Researcher, *Leveraging Algorithmics for data governance within Justice Systems: Insights from Chile and Australia*

Chair – Dr Justin Ellis

11.20am – 11:35am

Morning Tea, served in ELI-115

Session Two: 11.35am – 1.00pm

Governance, Decision Making & Vulnerability

Maya Arguello Gomez, Swinburne University, *Shaping the Future: Towards a Comprehensive Framework for Algorithmic Governance*

Christine Armstrong, University of Newcastle, *Artificial Intelligence Technology as an Aid for Vulnerable Complainants*

Justin Ellis, University of Newcastle, *Algorithmic Justice in the metaverse: Perpetuating harm and hope for LGBTQ+?*

Tatiana de Campos Aranovich, Macquarie University, *Regulating SaMD: Transparent and explainable AI medical devices for what?*

Chair – Dr Eliezer Sanchez

1.00pm - 1.30pm

Lunch, served in ELI-122

Program Overview

Session Three: 1.30pm – 2.40pm

AI systems

Lyria Bennett Moses, University of New South Wales (UNSW), *AI Decision-Making in Courts and Tribunals: A project to Preserve Judicial Values*

Shiri Krebs, Deakin University, *Legal and Technical Blind Spots in Technology-Driven Counterterrorism*

Alison Gerard & Leanne Weber, University of Canberra, *Automation within Australia's Criminal Deportation System; Questioning the extent of Algorithmic Approaches to Visa Cancellation*

Chair – Dr Bin Li

2.40 pm – 2.55pm

Afternoon Tea, served ELI-115

Session Four: 2.55pm – 4.20pm

Court Systems & Alternative Legal Services

Armin Alimardani, University of Wollongong & Milda Istiqomah, Brawijaya University (Indonesia), *AI in Sentencing: A Case for Consistency in Indonesian Sentencing Corruption Decisions* (hybrid)

Mirella Atherton, University of Newcastle, *The Digital Revolution in Banking and Finance*

Dominique Moritz, University of Sunshine Coast, *Using Artificial Intelligence to Generate Child Sexual Exploitation Material: Challenges and Implications for Law and Justice*

Ybiskay Gonzalez, University of Newcastle, *Towards a Decolonial Approach to AI*

Chair – Dr Shaun McCarthy

Online – Breakout in Conference Meeting

Shu Zhang, Deakin University, *Technology and Recent Developments of ALSPs in Australia* (online)

Bruno Zeller, University of Western Australia, *Justice and AI* (online)

Cari Hyde-Vaamonde, Kings College London, *Judging the Algorithm: A case study on the risk assessment tool for intimate partner violence in Basque Country* (online)

Chair – Professor Tania Sourdin

4.20 pm – 5.00pm

Keynote, Professor John Zeleznikow, Research Unit of Excellence Digital Society: Security and Protection of Rights, University of Granada (Spain), *Using Algorithms in the Justice System – is the software a friend or foe?*

5.00pm

Conclusion & Thanks

Tania Sourdin

Please join us for drinks and canapes in room ELI-115

Professor Tania Sourdin, University of Newcastle, *Justice – Dystopia or opportunity?*

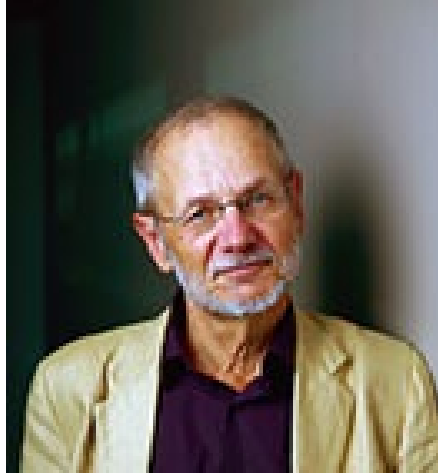


Professor Tania Sourdin is the Dean of the University of Newcastle School of Law and Justice and President of the Academic Senate. In the past two decades, she has conducted qualitative and quantitative research projects into aspects of the dispute resolution and justice system systems in 16 Courts and Tribunals and 8 external dispute resolution schemes within Australia. Other research has focused on complaints handling, therapeutic justice, restorative justice, justice innovation, technology, delay and systemic reforms.

In 2003 and 2005 she was the Chief Co Investigator on two Australian Research Council projects that explored the use of artificial intelligence in the legal domain. Since that time she has had a number of projects that have explored the use of AI in the justice system and the role of a human judge in terms of court engagement and collaboration (the problem solving court). Professor Sourdin completed the 6th edition of her book “Alternative Dispute Resolution” in 2020 (Thomson Reuters) and has focussed on Judges and AI and has published papers such as “Judge v Robot” (2018), chapters that include “Must a Judge be Human?”(2018) and books – “The Responsive Judge” (Springer, 2018), “The Multi Tasking Judge” (Thomson Reuters, 2012). She completed a short co authored book on “Digital Technology and Justice : Justice Apps” (Routledge, 2020) and her book “Judges, Technology and AI” was published in June 2021(Edward Elgar).

Professor Sourdin is the author of a number of more than 140 books, articles and papers, that are focussed on justice reform issues and has published and presented widely on a range of topics including complaints, ADR, justice innovation, justice issues, mediation, conflict resolution, collaborative law, artificial intelligence, technology and organisational change. She has also retained a part time practice focus and has worked for more than 30 years as a lawyer, 25 years in various senior part time tribunal positions and as a mediator and has since 2014 been the National Broadband Network (a \$40 Billion plus project) industry dispute resolution advisor within Australia.

Keynote, Emeritus Professor Terry Carney, University of Sydney, *'Learning from Robodebt: An Algorithmic Justice Thought Experiment?*



This presentation takes the form of a thought experiment designed to stress test legal measures and associated reforms contemplated as 'future proofing' against any repetition of Robodebt. It argues that the accountability machinery remains fragile and open to abuse. More creative innovative measures may still be required.

Terry Carney AO, FAAL is Emeritus Professor of Law at the Law School, University of Sydney. For nearly 40 years he was a part-time member of the AAT and its predecessor dealing with social security appeals. In early 2017 he handed down the first of five decisions finding Robodebt to be unlawful. Following non-renewal of his AAT post he published academic articles exposing the illegality from early 2018. He has written widely on the role of AI and algorithms in welfare and is an Associate Investigator with the ARC Centre of Excellence on ADM and Society.

Keynote, Professor John Zeleznikow, Research Unit of Excellence Digital Society: Security and Protection of Rights, University of Granada (Spain), *Using Algorithms in the Justice System – is the software a friend or foe?*



The first research on Artificial Intelligence and Law occurred in the 1970s. At that stage the focus was upon modelling the law and developing Artificial Intelligence that provided the legal community with useful decision support. Examples of such systems included TAXMAN and the British Nationality Act as a Logic Program. Such systems were rule-based and particularly useful for compliance checking. These rule-based systems have been used and widely accepted with regards to traffic infringements and social security and taxation entitlements.

Fifty years later, the community no longer considers rule-based systems to be Artificial Intelligence. Rather they focus upon the development of robots using machine learning. But whilst machine learning has been gainfully used in the medical and financial domains, its use, especially in terms of fully automated systems is both limited and flawed. The legal domain required solutions to be argued and explained. Transparency is fundamental and Machine Learning does not provide transparency.

So how can we provide Algorithmic Justice? For rule-based systems, we can examine the rules. But machine learning essentially uses a black box to determine statistical connections. It is possible for such systems to provide argumentation, explanation and evaluation (our Split-Up system did so thirty years ago), but only via rationalisation. System users need to then examine whether the explanations provided are feasible. Thus, when using algorithms in the Justice System, we must evaluate the output of the system and if feasible use the output as advice. We should not allow algorithms to be used in a robotic manner. And any algorithm should be unique to the domain and country in which it is used. The idea of a Robo judge is in general fanciful.

John Zeleznikow is a Professor of Law and Technology at La Trobe University in Melbourne Australia. He has conducted research and taught in both Computer Science Departments and Law Schools. In his Split-Up system of the 1990s he pioneered the use of machine learning to support legal decision making. The application area was the distribution of property in Australian Family Law. He followed this up with the use of game theory to support trade-offs and negotiation in legal disputes. He has written 4 books and 102 refereed journal articles, received over \$A8.5 million in research grant funding and successfully supervised 20 PHD students. He has a H index of 37, with 4547 citations.

Melissa Hamilton, University of Surrey (UK), *Algorithms Driving Criminal Justice Decisions*

In criminal justice, the practice of predicting who will commit a crime is a long-standing tradition. Historically, risk predictions were based on the instinct or whim of a human decision-maker. Predictions may inform such outcomes as whether to arrest, release a person pretrial, sentence a convicted individual to a term of imprisonment, or release early an incarcerated prisoner. Today, algorithms developed from scientific studies on what factors predict offending are deployed across jurisdictions to inform such decisions. The great hope is that this algorithmic form of artificial intelligence (AI) offers more accurate predictions while avoiding the downsides of human biases when criminal justice officials are relying upon their own predictive guestimates.

AI-led risk assessment tools are informed by scientific research concerning which factors are predictive of recidivism and thus support the evidence-based practices movement in criminal justice. Automated assessments of individualized risk (low, medium, high) permit officials to make more effective management decisions. Computer-generated algorithms appear to be objective and neutral.

But can the AI turn in criminal justice offer transformational reforms to reduce prison populations without sacrificing public safety? Or does the AI turn present a cautionary tale when the AI can result in unintended consequences such as recreating racial inequalities if minorities are systematically assigned higher risk predictions? This presentation reviews the evidence to address these issues from the legal, data science, and criminological literatures.

Melissa Hamilton (JD, PhD): Melissa is a Professor of Law & Criminal Justice at the University of Surrey School of Law. She is a Surrey AI Fellow, Royal Statistical Society fellow, member of the American Psychological Association, and Sentencing Academy advisor. Research interests include algorithmic justice and data science in law.

Eliezer Sanchez-Lasaballett, University of Newcastle, *Algorithmic Justice and Regulating Black Box AI*

The debate over algorithmic justice has shifted dramatically in the last six months as we transitioned from human-algorithm-powered AI to AI-algorithm-powered AI. The idea of a coder's liability for negligent assumptions baked into decision-making tools is no longer at the forefront of AI regulation. Regulating AI requires a holistic approach that extends beyond the realm of ethics in self-regulating industry codes to the point of considering public international treaty law, as was the case with nuclear power. As AI utopian and dystopian discourses unfold before us, we must consider not only the winners and the losers in regulating the market for AI but also the unintended victims of technological transformation.

AI encompasses large language models, facial recognition applications, and decision-making tools permeating most domains of human and institutional interactions. This paper explores the possibilities of regulating AI presence in all these areas of human life including contracts, negligence, consumer protection, corporations, public administration, and human rights. It takes the view that what is at stake is not just data privacy but individual self-determination. Ethical demands for algorithmic explainability and interpretability need to inform all possibilities of regulatory accountability at the national and international levels. We need a new social contract that ensures that the interaction between human lives and AI continues to be sustainable.

Dr Eliezer Sanchez-Lasaballett: Eliezer is a Lecturer at the Newcastle School of Law and Justice. His research covers comparative contract law and legal innovation.

Andrea Matus, Legal Practitioner, *Leveraging Algorithms for data governance within Justice Systems: Insights from Chile and Australia*

This paper explores the necessary application of data governance for utilizing algorithms in justice systems, with a focus on case studies from Chile and Australia. Using examples from these two countries, the research provides a comprehensive analysis of case studies that leverage algorithms for data governance in justice systems. With the fast advancement of digital technologies, jurisdictions have increasingly turned to algorithms and data analytics to improve decision-making processes, streamline operations, and enhance overall efficiency. However, the integration of algorithms in justice raises significant risk and ethical concerns regarding transparency, accountability, and potential biases.

This critical analysis focuses on current practices and challenges associated with algorithmic data governance, in responding to urgent need to solve complex problems in Chilean and Australian jurisdictions. By critically examining both countries' approaches, this research shares valuable insights into the complexities of leveraging algorithms in different jurisdictions that both experience limited resources. The paper includes analysis of policy and legal frameworks and practical implementations of algorithms based on practitioners' examples.

The digital journeys of Chile and Australia shed light on the benefits, limitations and ethical considerations of algorithmic data governance. The outcomes presented, highlight the transformative power of algorithms and the importance of global collaboration in leveraging their potential. The key recommendations emphasize best practices to enhance the responsible use of algorithms in justice systems whilst addressing concerns related to fairness, integrity, and human rights. Finally, this paper provides guidance for policymakers, practitioners, and researchers seeking to leverage algorithms while ensuring transparency, fairness, and accountability.

Andrea Matus: Andrea is a lawyer from the Catholic University of Temuco, Chile. She graduated as the top student of her class and worked in the Chilean Justice as a legal intern and then as an Assistant at the Temuco Guarantee Court. She has a certificate in digital ethics and bioethics.

Dr. Carol Hullin: Carol is an esteemed researcher and expert in data governance and its societal implications. With a Ph.D. in Health Informatics & Master of Law LLM, she has dedicated her career to exploring the transformative potential of algorithms for societal advancements. Dr. Hullin's research focuses on the intersection of technology, society, and global collaboration, with a particular emphasis on justice, healthcare and education sectors.

Olivia Bakyew: Olivia is an accomplished senior government advisor and data governance specialist, bringing expertise in public law and health. Her career spans from data modelling for government services demand, data integration, and advancing data governance practices. She has shaped state

Maya Arguello Gomez, Swinburne University, *Shaping the Future: Towards a Comprehensive Framework for Algorithmic Governance*

The past decade has seen major advances towards the concept of algorithmic governance, a developing field within artificial intelligence (AI). A notable shift in the next five to ten years will be the integration of generative AI into decision-making and writing processes, particularly within the justice system. However, the use of AI in these areas has sparked ethical and legal debates, highlighting the necessity for solid AI governance frameworks. Issues concerning fairness, transparency, and how these AI tools might or might not affect fundamental human rights have also been raised. Within the sentencing context, questions have arisen around the possibility of AI-induced judicial mistakes and as such there appears a pressing need for regulatory measures to protect rights and enforce accountability.

This paper therefore aims to delve into the expected future developments in the field of algorithmic governance in a criminal justice context. It will examine how these advancements could influence the creation of comprehensive governance frameworks and structures for AI technologies and how such frameworks and structures can then in turn promote the ethical and responsible use of AI within the justice system.

Maya Arguello Gomez: Maya is a Lecturer in Law, and PhD Candidate at Swinburne Law School. Her teaching and research spans criminal law, international law and human rights and digital criminology. Maya's current research focus is on the role of AI in sentencing.

Vulnerable consumers are often not privy to the same access to complaints processes as other consumers. The 2022 Australian Standard on Complaints Handling seeks to better address the needs of vulnerable consumers and recommends, '[o]rganizations should provide support and practical assistance to such people to make a complaint, if needed' (Australian Standards, 2022). While the Australian Standard emphasises the need to identify and assist vulnerable consumers, practical advice regarding offering such assistance is scarce, both within government policies and the complaint policies of organisations.

While AI has been utilised to improve the expediency and efficiency of complaint processing, its role as a complaint tool for consumers is underutilised. This work-in-progress research will examine the effect of AI as a complaint tool on the complaint behaviour of consumers who speak English as a Second Language (ESL). These consumers are often vulnerable to unequal treatment in service settings, as a consequence of language discrimination. Using an experimental approach, the effect of AI technology (as complaint-composition aid) on ESL complainants' perceived fairness and likelihood of successful complaint will be examined. The perspective of complaint handler will also be addressed via experiments examining the effects of AI-assisted complaints on complaint handlers' perceptions of complaint legibility and legitimacy. The outcomes of this research will provide insights into the potential of AI as a tool for improving equity, accessibility and inclusiveness within complaint processes.

Dr Christine Armstrong: Christine a Lecturer in Marketing at the Newcastle Business School. Christine's research focus is consumer complaints behaviour and management, providing practitioners with strategies to improve their complaint management. Christine has published her complaint research in highly ranked journals (A/A*/Q1) including the European Journal of Marketing, and Journal of Marketing Management.

Dr Alicia Kulczynski: Alicia is an Associate Professor of Marketing at the Newcastle Business School. Alicia has undertaken research that has influenced the evaluation of products and services, as well as the development of marketing strategies for both local and global brands. Her contributions have been acknowledged in prestigious international academic journals, including the International Journal of Research in Marketing, European Journal of Marketing and Psychology & Marketing.

Dr Margurite Hook: Margurite is a Lecturer of Marketing at the Newcastle Business School. Margurite's research investigates consumer involvement with brands including through brand communities, marketing communications and digital technologies. Margurite's research has been published in leading academic journals including Journal of Brand Management, Journal of Strategic Marketing, International Journal of Consumer Studies and Journal of Marketing Behaviour.

Justin Ellis, University of Newcastle, *Algorithmic Justice in the metaverse: Perpetuating harm and hope for LGBTQ+?*

The immersive, simulated, and unregulated nature of the metaverse provides risks and benefits for personal and political LGBTQ+ expression. Yet, as with all emergent technologies, they are prone to perpetuating structural biases and harmful ideologies, and can be sites of hate and violence. At the same time, they can open up new ways to express diverse sexual orientation and gender identity and to combat prejudice. This presentation provides an overview of current criminological understandings of the risks and benefits of the metaverse to LGBTQ+ personal and political expression and a snapshot of responses to issues that are likely to impact minority populations in general, with women belonging to these groups being disproportionately targeted. In doing so, the presentation contributes to ongoing research into digiqueer criminology, which examines the relationship between digital media technologies, institutional trust and vulnerable populations, with a focus on LGBTQ+.

Dr Justin Ellis: Justin is a senior lecturer in criminology at the University of Newcastle School of Law and Justice, and a delegate of the Responsible Metaverse Alliance, a social enterprise and international movement dedicated to supporting the ethical development of the metaverse. His research examines the relationship between digital media technologies, institutional trust and politically vulnerable populations with a focus on LGBTQ+. Justin's 2021 monograph *Policing Legitimacy: Social Media, Scandal and Sexual Citizenship* (Springer 2021) critically analyses the relationship between LGBTQ+ identity- based rights claims, police accountability, and the regulation of digital platforms. His second book, *Representation, Resistance and the Digiqueer: Fighting for Recognition in Technocratic Times* (Bristol University Press 2023) examines the resurgence of representational harms that misrecognize, erase or omit vulnerable communities, and which has once again demonstrated the inequities of LGBTQ+ misrepresentation.

Tatiana de Campos Aranovich, Macquarie University, *Regulating SaMD: Transparent and explainable AI medical devices for what?*

AI medical devices (or "Software as a Medical Device" - SaMD) promise wonders for the better health of people. The devices may perform similarly or better than humans in diagnosing and treating the most common or deadliest diseases, as well as enable a patients' holistic view, keeping them healthy instead of treating diseases. Also, they may drop sky-rocking costs in an unprecedented way. However, if AI may be the magic solution for dealing with health systems' major challenges, it can also pose a safety threat. In health, risks are the highest and may lead to the person's death. Providing a safe ground and setting the game rules for the widespread implementation of AI medical devices and its investments is now paramount for any judicial system. A gap in the literature is knowing which level of transparency and explainability, as set in guidelines, we need around AI medical devices. To answer this question, this research identifies which stakeholders, for what purposes, and in which format transparency and explainability are required in healthcare. For such, it uses doctrinal and inductive methods. The study has found that stakeholders predominantly do not understand how drugs and traditional medical devices function. They mainly trust regulatory assurance and information provided (e.g., though labels and instructions). Therefore, we do not require full and amorphous transparency and explainability, we do need assurance through a robust approval to market regulatory system. The research is relevant to subsidizing lawmakers and regulators on drafting overhauls and measures on AI healthcare matters.

Tatiana de Campos Aranovich: Tatiana is a PhD in Law Candidate at Macquarie University in the artificial intelligence and health field. She had also been a senior civil servant in Brazil with experience in public policy issues in a multidisciplinary approach, working at the Brazilian Healthcare Regulatory Agency for 8 years.

Lyria Bennett Moses, University of New South Wales (UNSW), *AI Decision-Making in Courts and Tribunals: A project to Preserve Judicial Values*

The Australian Institute of Judicial Administration (AIJA) engaged researchers at UNSW Law and Justice to prepare a guide for judges, tribunal members and court administrators in the Asia-Pacific region on artificial intelligence (AI) in the courtroom. The guide (launched in 2022, available at <https://aija.org.au/new-report-ai-decision-making-and-the-courts>) addresses:

- Key challenges and opportunities that AI tools present for courts and decision-makers;
- Different techniques falling under the umbrella of AI, their affordances and limitations;
- Examples of different areas where these techniques have been used in courts, both regionally and globally, together with a discussion of important issues arising in those contexts; and
- Interaction between such uses and core judicial values.

The guide is framed around questions' that should be asked of AI systems and tools being considered for deployment in courtrooms and registries to ensure that their use is in line with judicial values. We are working on an updated version of the guide and also looking to create a platform so that judges, tribunal members and court administrators can stay up to date with technological developments and changes in practice while continuing to learn from each other. This session will explain the approach taken in the guide, highlight some of its findings and lead into an interactive discussion around what should needs to be added and how we might make this resource sustainable going forward.

Dr Lyria Bennett Moses: Lyria is Director of the Allens Hub for Technology, Law and Innovation and a Professor and Associate Dean (Research) in the Faculty of Law and Justice at UNSW Sydney. In AI, she is co-author (with Dr Michael Guihot) of Artificial Intelligence, Robots and the Law (LexisNexis) and is a committee member for AI standards with Standards Australia (and through them participates in ISO/IEC JTC1 SC 42 standards).

Shiri Krebs, Deakin University, *Legal and Technical Blind Spots in Technology-Driven Counterterrorism*

Following the 9/11 attack on the Twin Towers, global counterterrorism has shifted from a focus on punishment of past terror acts to a focus on prevention and prediction of future terrorist activity. This is true both at the various national levels and at the international level. At the national level, states have been adopting preventive measures such as preventive detentions and control orders aimed at preventing future attacks, as well as criminalizing a variety of preparatory actions. At the international level, the UN Security Council has led efforts aimed at disrupting transnational terror networks, including by imposing assets freezes and travel bans on individuals and entities *associated* with terror organisations, and collecting and sharing travellers' data and intelligence information more broadly.

This preventive, identity-based, approach to counterterrorism is enabled and advanced through a growing reliance on sophisticated predictive algorithms, human and signal intelligence, big data analytics, and visual and matching technologies (such as facial recognition). This presentation aims to shed light on the role of the UN Security Council in mandating and legitimising a deepening use of predictive technologies in various counterterrorism contexts, including border security. It identifies blind spots in technology-driven counterterrorism and proposes methods to mitigate these blind spots through behavioural human-machine trainings and a deeper understanding of how these technologies work and influence legal decision-making processes. Importantly, I argue that technology-generated data have many promises for counter-terrorism decision-making; at the same time, it can also lead to operational errors and jeopardize safety and security by masking evidential uncertainties and numbing the exercise of common-sense thinking.

Dr Shiri Krebs: Shiri is a Professor of Law at Deakin University and an affiliated scholar at Stanford University Center for International Security and cooperation (CISAC). She is the Chair of the Lieber Society on the Law of Armed Conflict and Co-Lead of the Law and Policy Theme at the Australian Government Cyber Security Cooperative Research Centre (CSCRC).

Alison Gerard & Leanne Weber, University of Canberra, *Automation within Australia's criminal deportation system; Questioning the extent of Algorithmic Approaches to Visa Cancellation*

Australia has been internationally condemned for its harsh *external* border controls that seek to control the mobility of would-be asylum seekers through visa denial, interdiction and offshore detention. Less well known is the fact that exclusionary *internal* controls have been repeatedly ramped up over the past two decades. In 2014, significant amendments to s501 of the *Migration Act 1958* (Cth) introduced mandatory visa cancellation for certain non-citizens on character grounds, including those sentenced to a prison term of 12 months or more. In this paper, we explore preliminary findings from our current study on criminal deportation in Australia, funded by the Australian Research Council, to determine the nature and extent of automation in Australia's visa cancellation process.

Our analysis of documentary sources such as parliamentary inquiries and committee reports, independent reviews and government policy statements, raises the spectre of a visa cancellation pipeline, feeding a highly automated deportation machinery. We consider the normative implications of an automated approach with reference to theorising about human-non-human networks, surveillant assemblages and algorithmic governance (Milivojevic 2021) in which the subject to be governed is addressed, not in terms of their humanity, but as the digitally coded occupant of a particular risk category (O'Malley 2010).

Dr Alison Gerard: Alison is a Professor of Law/Criminology in the Canberra Law School. Her research focuses on social justice and has been published in leading international and Australian journals. Her sixth book, which focuses on the criminalisation of young people in Out-of-Home Care, was published by Routledge in 2023.

Dr Leanne Weber: Leanne is a Research Professor in the Canberra Law School with a multi-disciplinary background in the social sciences. She researches policing and border control using criminological and human rights frameworks. She has also authored more than 50 journal articles and book chapters on policing and border control with international journals and publishers.

Artificial Intelligence (AI) has increasingly found its place in diverse legal contexts, including its application within the criminal justice system. Despite its growing prevalence, it is not without its critics. Some scholars have expressed concern that AI may inadvertently perpetuate existing biases and compromise due process. Recently, the Indonesian Supreme Court introduced sentencing guidelines aimed at enhancing consistency in corruption offence cases. While we acknowledge the potential limitations and pitfalls associated with the use of AI, we maintain that the inherent characteristics of these guidelines present a unique opportunity. Specifically, we propose that AI could serve as a valuable tool to assist judges in delivering more consistent sentencing decisions in corruption cases.

Dr. Armin Alimardani: Armin is a Lecturer in Law and Emerging Technologies at the School of Law, University of Wollongong. His interdisciplinary research sits at the intersection of law, technology, science and philosophy. His publications and talks focus on the social, ethical and legal impact of emerging technologies such as artificial intelligence, neuroscience and genetics.

Dr Milda Istiqomah: Milda is an Associate Professor at Brawijaya University, Indonesia, specialising in the study of terrorism sentencing outcomes, Indonesian counter-terrorism strategies, and the nation's criminal justice system. Her rigorous approach employs advanced statistical analysis in criminal justice and criminology.

Mirella Atherton, University of Newcastle, *The Digital Revolution in Banking and Finance*

Financial institutions are leaders in digital transformation and have made a fundamental contribution to digital platforms and digital ecosystems. The use of artificial intelligence by banking, investment and credit institutions have led to both advances and challenges. The digital revolution has created a rush of opportunities for the financial services sector but there is a need to recognise risks inherent in the use of this technology. Data analytic techniques behind artificial intelligence, such as algorithms and machine learning have proven to be powerful. Collection and analysis of personal data has become extraordinarily sophisticated and the focus on fairness has become intensified as bank and non-bank lenders apply artificial intelligence-based credit determination approaches to loan applications. Artificial intelligence has no responsibility and there are no repercussions for the use of artificial intelligence in automated decision making. Artificial intelligence is now understood better by third parties than it is by financial institutions or consumers themselves. The European Union have considered a number of guidelines for the execution of digital strategies, these contain people at the centre, solidarity and inclusion, freedom of choice, safety and security, and sustainability. It is important to remember that not all new technologies have to be implemented and there will be new technologies presented to be judged on their merits in the near future. Emphasis needs to be placed on human capital with even higher intensity than the technology. While new technology promises efficiency, cost reduction and differentiation risks arise from volatility, uncertainty, complexity, and ambiguity.

Dr Mirella Atherton: Mirella is an academic at the University of Newcastle's, School of Law and Justice. Mirella specialises in Banking and Finance Law. Mirella's research conducts an innovative and much needed investigation into the legal and social factors involved in maintaining financial data privacy and reducing discrimination for the benefit of all consumers.

Dominique Moritz, University of Sunshine Coast, *Using Artificial Intelligence to Generate Child Sexual Exploitation Material: Challenges and Implications for Law and Justice*

Child sexual exploitation material (CSEM) is a global issue, poses a significant threat to children and is increasingly prevalent in the community. CSEM is offensive or abusive content, available in print or electronically, which depicts children. CSEM legislation in Australian states and territories criminalises behaviour dealing with CSEM including where an individual produces, disseminates or possesses the content. Whether the material depicts real children is irrelevant to its lawfulness; computer-generated content, known as virtual CSEM, is still inherently harmful as it can disguise the abuse of children, can act as a gateway to more serious offending and can aid child grooming. Artificial intelligence has expanded opportunities for offenders to produce virtual CSEM. Using artificial intelligence, offenders can increase their capacity to create CSEM; the nature of artificial intelligence generating CSEM means there could also be difficulties for law enforcement to hold offenders accountable. This paper will consider how the existing CSEM law interacts with offending using artificial intelligence. More specifically, it will identify whether existing legislation appropriately captures CSEM production involving artificial intelligence and the challenges that exist for the law to capture CSEM offending when artificial intelligence is involved. In so doing, it will identify challenges and policy implications for justice innovation.

Dr Dominique Moritz: Dominique is a senior lecturer at the University of the Sunshine Coast and leading researcher in children's law. Dominique holds a PhD in law. Her knowledge broadly encompasses criminal law, health law and regulatory concepts related to children with a particular interest in child sexual exploitation material criminalisation.

Ybiskay Gonzalez, University of Newcastle, *Towards a Decolonial Approach to AI*

AI have altered society, and criticisms have arisen everywhere. Most notable, the criticism has been about the racialisation of populations, the black box avoiding the lack of accountability, and the lack of regulation. This article discusses such criticism and argues that scholars must demonstrate the inherent contextual issues and power relations involved in the progress of AI, going beyond its neoliberal imaginary. Drawing on a recent literature review of critical racial studies and decolonial theory about AI, the paper shows how AI is embedded in the 'colonial/white gaze'. The article is organised as follows. First, I introduce our reading of decolonial and critical race theories to discuss how these theories offer sound critiques of AI. Second, I re-read the risks of AI in light of these decolonial and critical race approaches by paying particular attention to the White/colonial gaze and demonstrating how it functions as a prohibitive barrier towards developing novel and critical visibilities of the power of AI for humanity. The paper concludes that a decolonial perspective on AI benefits from piercing through this more refined understanding of power for the benefit of humanity.

Dr Ybiskay González: Ybiskay holds a PhD in Politics from the University of Newcastle, Australia. Her research interests focus on discourse policy analysis and decolonial feminism. She is currently a casual academic staff at the University of Newcastle, Australia, in the discipline of Politics. She has published about populism, political polarisation in Venezuela, and decolonial feminism.

Lawyer's monopoly in the legal profession was based on their specialty and extensive training. Yet this monopoly, to some degree, is waning. In particular, the cost of legal services has been a barrier to justice. Such barrier conflicts with the lawyers' duty to the administration of justice. Hence, efforts have been made to reduce the cost of legal services, and with that came the evolution of Alternative Legal Service Providers (ALSPs).

With the development of technology, alternative legal services achieved steady growth around the world, as eye-witnessed by the legal industry and legal market. Much of current research in this area is focused, and in some respects limited to, the development of ALSPs and their use in the United States (US), Canada, and the United Kingdom (UK). Therefore, the scope of the research manuscript is twofold: first, an extensive investigation of the development of ALSPs with the assistance of algorithmic tools in Australia; and second, a critical assessment of the impact of the new ALSPs in the Australian legal industry, legal profession and legal education.

This manuscript seeks to contribute to the literature surrounding the impact of ALSPs on the legal profession and the legal education in Australia. It is hoped that ALSPs would increase the diversification of the profession and address long-time criticisms relating to cost and accessibility. It is vital that the profession and the legal education for the next generation lawyers addresses the risks associated with the development of the ALSPs in a comprehensive manner.

Dr Shu Zhang: Shu is a senior lecturer in commercial law at Deakin Law School. Her research interests include international commercial law, dispute resolution and international arbitration, as well as comparative law. She has published various manuscripts with leading journals in this area.

Bruno Zeller, University of Western Australia, *Justice and AI*

Rules that govern and control our lives are intrinsically interwoven into the social construction of a society. There is no debate that the Internet of Things (IoT) has fundamentally changed what we see as reality that is how societies interact. This paper argues that the development of the IoT specifically AI has outstripped the ability of a society to form a cohesive social network based importantly on justice. Professor Rawls argued in 1999 that: "the primary subject of justice is the basic structure of society, or more exactly, the way in which the major social institutions distribute fundamental rights and duties and determine the division of advantages from social cooperation." The question is whether the notion of justice needs to be revisited as we have entered a period of instability which is arguably driven by elite overproduction.

This paper asserts that privacy and justice are interlinked, and any user of an integrated system controlling society needs to be protected and arguably cybersecurity is the key to that effect. One point which is of great interest is whether any individual can also use cybersecurity expressed in his or her actions when the use of the IoT is an issue. In effect justice is compromised if the IoT restricts the individual to such an extent that he or she is unable to shield themselves from any unwanted intrusion into their personal notion of justice.

Dr. Bruno Zeller: Bruno is a Professor and Senior Honorary Research Fellow of Transnational Commercial Law, University of Western Australia

Cari Hyde-Vaamonde, King's College London, *Judging the Algorithm: A case study on the risk assessment tool for intimate partner violence in the Basque country*

Since 2010, the output of a risk assessment tool that predicts how likely an individual is to commit severe violence against their partner has found its way into Basque country courtrooms. The EPV, the tool developed to assist police officers during the assessment of domestic violence cases, has been used to assist the decision-making of judges. With insufficient training, judges can be exposed to an algorithmic output that could influence their decision on this type of domestic violence.

While critical algorithmic literature is mainly focused on English-speaking countries, in this paper we examine the risks, harms and limits of this tool implemented within the context of intimate partner violence in Spain. Through the lens of a computer scientist, a law scholar and a judge exposed to this algorithm, we propose a transdisciplinary framework to analyse this system. Moving the critical analysis beyond the risks of bias and algorithmic opacity, we examine technical and legal pitfalls that could lead to undesired consequences on subjects suffering domestic violence today in the Basque country. We suggest that even unsophisticated and transparent algorithmic tools need to be assessed to understand their impact.

Cari Hyde-Vaamonde: Cari is an experienced lawyer and court advocate fascinated by the potential for code and AI to reform how law and justice function. Beyond research, she is Visiting Lecturer (Law and Technology) at King's College London and co-convenes the Innovations In Judging network for the Law and Society Association.