BRUNEL CENTRE FOR AI

Thought Leadership Programme Winter/Spring

2023

24 February 2023 / 4:15pm-5:15:pm The Regulation of Emotion and Intention Detection in the EU and UK Dr Patricia Živkovi (University of Aberdeen)

8 March 2023 / 2pm-3pm Digital Poverty Prof. Ashley Braganza (Brunel University London) Prof. Meredith Jones (Brunel University London) Dr Rachel Stuart (Brunel University London) Dr Vassilis Charitsis (Brunel University London)

23 March 2023 / 2pm-3pm Al-Assisted Inventions in the Field of Drug Discovery: Readjusting the Inventive Step Analysis Dr Olga Gurgula (Brunel University London)

19 April 2023 / 2pm-3pm Design for Virtual Reality Dr Sabah Boustila (Manchester Metropolitan University)

4 May 2023 / 2pm-3pm Artificial Intelligence and Copyright in the Creative Industries *Dr Hayleigh Bosher* (Brunel University London)

24 May 2023 / 2pm-3pm
Virtual Reality and Artificial Intelligence
Prof. Marco Gillies (Goldsmiths, University of London)

14 June 2023 / 2pm-3pm Fashion in the Metaverse and Beyond *Kadine James* (The Immersive Kind)

4 July 2023 / 2pm-3pm Military Uses of Artificial Intelligence **Dr Branka Marijan** (Senior Researcher, Project Ploughshares)

12 July 2023 / 2pm-3pm Law Enforcement Use of Facial Recognition in the UK– A Normative Regulatory Framework Dr Asress Adimi Gikay (Brunel University London)



ORGANISER Brunel Centre for Al

SERIES COORDINATORS Dr Nadine Aburumman | Computer Science Dr Asress Adimi Gikay | Brunel Law School





The Regulation of Emotion and Intention Detection in the EU and UK



Dr Patricia Živković University of Aberdeen 24 February 2023 an online event 4:15 PM-5:15 PM (UK Time)

The Regulation of Emotion and Intention Detection in the EU and UK: Dr Patricia Živković

With the wide use of machine learning in today's world, we are fast approaching new ethical and legal issues every day. This seminar will focus specifically on the current state of regulation of emotion/affect and intention recognition in the European Union and the United Kingdom.

Dr Živković will showcase the use of such machines in today's society and their potential in the future. She will explain further the ethical concerns raised by these applications and discuss the status of the current and future regulations in the field, focusing mainly on the current EU Proposal for the AI Act. The topic is part of Dr Živković's ongoing research on biometrics and law, which also covers issues of the reconceptualisation of the legal nature of biometrics as body parts and governance of general and super AI.

Moderator: Dr Pin Lean Lau (Brunel University London)

Patricia Živković is a Lecturer in Law at the School of Law, University of Aberdeen. She teaches Honours courses on the regulation of biometric data and profiling, data privacy, and artificial intelligence and law. She is an author of a monograph on Cyber Law in Bosnia and Herzegovina, and a member of the Scottish Law and Innovation Network (SCOTLIN).



Digital Poverty

Prof. Ashley Braganza Prof. Meredith Jones Dr Rachel Stuart Dr Vassilis Charitsis

Brunel University London

8 March 2023 an online event 2 PM-3 PM (UK Time)

Digital Poverty: Prof. Ashley Braganza, Prof. Meredith Jones, Dr Rachel Stuart and Dr Vassilis Charitsis

A BA funded study of digital poverty in Margate, seen through the lens of two separate communities that had recently moved to the town provided insights that spoke of resilience and need for connectivity in a space of digital exclusion.

Using the data that we gathered from qualitive interviews with members of the Roma community and those who had moved to Margate as part of the creative renaissance which has become an important part of Margate's rebranding, we will explore digital marginalisation using the theory of necro resistance. The notion that small changes can make survival possible in liminal and marginalised spaces. We propose that survival on the margins of digital inclusion provides valuable insights for resolving a growing global challenge and assisting policy maker decisions.

Prof. Ashley Braganza (Brunel University London) is Professor of Organisational Transformation Change at Brunel Business School. He is teaching on Undergraduate and Postgraduate taught programmes. His research interests encompass big data, change management, strategy implementation, process and knowledge management, and transformation enabled information systems. He has published over 100 papers in prestigious academic and practitioner journals and three books. His past collaborations with practitioners from BT, Microsoft, McDonald's, Astra Zeneca, Friends Provident, Volkswagen Financial Services and the Department for Children, Schools and Families and academics have co-created knowledge and practical ways of successfully implementing complex change programmes.

Prof. Meredith Jones (Brunel University London) is Director of the pan-university Institute for Communities and Society. Meredith is a transdisciplinary scholar who works at the intersections of feminist theories of the body with media, gender, and cultural studies. She is particularly interested in popular culture, visuality, and embodiment, and has published widely in these areas. Her latest edited volume, Performing the Penis: Phalluses in 21st Century Cultures (with Evelyn Callahan) comprehensively introduces the emerging discipline of Penis Studies.

She often speaks publicly about social media, popular culture and feminism, and is an expert on the socio-cultural aspects of the Kardashians. Currently she is collaborating with Taylor & Francis Group to deliver a series of projects around new and innovative modes of publishing.

Dr Rachel Stuart (Brunel University London) is a criminologist who specialises in the research of marginalised communities. Her doctoral thesis was a study of webcam performers broadcasting adult content material– a study she undertook while simultaneously researching the impacts of policing on the health of sex workers with the London School of Hygiene and Tropical Medicine. She has also designed and conducted a longitudinal study of street sex workers before and during the COVID pandemic for the Doctors of The World. More recently she has been employed as a consultant by the London School of Hygiene and Tropical Medicine on a DHSC funded research around the impacts of COVID on The Gypsy Roma and Traveller Communities. Drawing on her positionality as a member of the Traveller community to highlight the issues that Travellers have experienced during the COVID pandemic in the context of structural racism. She is the primary researcher in the investigation of community-based solutions to the issues of digital exclusion that are experienced in the seaside town of Margate

Dr Vasilis Charitsis (Brunel University London) is a lecturer in Marketing at Brunel Business School. His research interests lie in the intersection of digital capitalism and the datafication of everyday life. Current work focuses on automated decision making, algorithmic biases, digital inequalities and injustices, and data activism. His work has been published, amongst others, in Social Movement Studies, Television & New Media, Surveillance & Society, Triple C: Communication, Capitalism and Critique, Marketing Theory, and ephemera: theory and politics in organisation.



Design for Virtual Reality

Dr Sabah Boustila Manchester Metropolitan University 19 April 2023 an online event 2 PM-3 PM (UK Time)

Design for Virtual Reality: Dr Sabah Boustila

Virtual environments (VEs) displayed through Virtual Reality (VR) are commonly used as an alternative means to accomplish delicate tasks or for decision-making in a safe and economical form. However, how accurately virtual environments/contents could be perceived and interpreted in comparison to real ones is still an open research question.

Moreover, interactions using hand controllers could be complicated and require the use of different buttons. In this talk, I will discuss some parameters that affect user experience and VR effectiveness and cover some factors to consider when designing virtual environments.

Moderator: Dr Nadine Aburmman (Brunel University London)

Dr Sabah Boustila is a Lecturer in User Experience and Digital Design at SODA, Manchester Metropolitan University. She has received her Ph.D. in Computer Science from the University of Strasbourg, France in 2016, and since then has multiple teaching experiences in a variety of disciplines including Computer Science and User Experience. Previously, she held a Lecturer and Research Assistant position in Computer Science at the University of Strasbourg (2015-2017) and two Postdoctoral Research Fellow positions at the University of Toronto (2018-2020) and the University of Strasbourg (2020), respectively.

Throughout her career, her research interests have been in Virtual and Augmented Reality (XR) and 3D interactions. Some of her projects are on spatial perception in virtual environments and accessibility in VR, just to name a few.



Al-Assisted Inventions in the Field of Drug Discovery: Readjusting the Inventive Step Analysis



Dr Olga Gurgula | Bru 24 March 2023 | an c 2 PM-3 PM (UK Time)

Brunel University London an online event

Al-Assisted Inventions in the Field of Drug Discovery: Readjusting the Inventive Step Analysis: Dr Olga Gurgula

Artificial intelligence ('AI') is increasingly applied at all stages of drug discovery. While AI has the potential to boost innovation, it also raises many important ethical, social, political and legal issues. Among the latter are the challenges that AI poses for the patent system.

With the rapid evolution of AI technologies and the increase in their computational power, the process of inventing has undergone substantial changes. As AI significantly expands human capabilities, inventions that were previously the result of human ingenuity, perseverance or serendipity can now be achieved by routine experimentations with the use of AI. Therefore, the patent law approaches that were developed to assess human-generated inventions are not suitable for AI-assisted inventions and require urgent reconsideration. In her talk, Dr Gurgula will explain that the proper test for the obviousness assessment needs to take into account the advancement of AI technology and will provide suggestions on how the analysis can be modified.

Moderator: Dr Elena Abrusci (Brunel University London)

Dr Olga Gurgula is a Senior Lecturer in IP law at Brunel University London. She has served as an expert consultant for international organisations, governments and nongovernmental organisations, mainly in the fields of IP and access to medicines. Olga is the author of many articles, including on IP and public health, strategic patenting by pharma companies, and compulsory licensing of trade secrets to enhance access to COVID-19 vaccines. Olga qualified as a Ukrainian attorney in 2004. Before the commencement of her PhD research in 2013, she worked in private practice for over ten years.



Artificial Intelligence and copyright in the creative industries



Dr Hayleigh Bosher | Brunel University London 4 May 2023 | an online event 2 PM-3 PM (UK Time)

Artificial Intelligence and copyright in the creative industries: Dr Hayleigh Bosher

The UK Government are keen to nature an environment of innovation for artificial intelligence (AI), and in progressing with the AI Strategy considered implementing a new copyright exception for AI text and data mining.

However, this presentation argues that this proposed exception does not meet international requirements of the Berne Convention and in any event is not the most effective way to encourage innovation for AI when engaging with the copyright industries.

Dr Hayleigh Bosher is a Senior Lecturer in Intellectual Property Law and Associate Dean (Professional Development and Graduate Outcomes) at Brunel University London, as well as, Visiting Research Fellow at the Centre for Intellectual Property, Policy and Management, a legal consultant in the creative industries and an advisor for the independent UK charity for professional musicians, Help Musicians, writer and Book Review Editor for the specialist IP blog IPKat. Hayleigh research in the area of copyright and related laws in the creative industries, particularly in music, social media, and more recently artificial intelligence and related technologies e.g., NFTs.



Virtual Reality and Artificial Intelligence



Prof. Marco Gillies | Goldsmiths, University of London 24 May 2023 | an online event 2 PM-3 PM (UK Time)

Virtual Reality and Artificial Intelligence: Prof. Marco Gillies

Despite many fictional depictions, Virtual Reality is a deeply embodied experience. What separates it from previous media is that we engage bodily with virtual worlds, with the simple act of turning our heads to look around creating the experience of presence: being in virtual reality.

The embodied nature of VR raises new challenges for design: we must include the body in our design processes in ways that were not necessary in screen based media. This involves grappling with embodied knowledge: things we know how to do physically but cannot fully explain in words. Machine Learning can tap into our embodied knowledge because it allows us to implement computer systems by performing examples, rather than explicitly programming. However, this approach leads us to rethink machine learning as a tool that allows us to express our embodied humanity. This talk will illustrate these ideas with a range of examples including virtual dance, narrative video games, cognitive tasks, and the impact of virtual bodies.

Moderator: Dr Nadine Aburumman (Manchester Metropolitan University)

Marco Gillies is the Academic Director of Goldsmiths' Teaching and Learning Innovation Centre. He has a long standing interest in pedagogy and particularly online and technology enhanced learning. He co-created the first MOOC from an English University and was instrumental in developing Goldsmiths' large scale online degrees: BSc Computer Science and MSc Data Science.



Fashion in the Metaverse and Beyond



Kadine James 14 June 2023 2 PM-3 PM (UK CMO Executive Director at Artificial Rome and Founder of the Immersive KIND

an online event

2 PM-3 PM (UK Time)

Fashion in the Metaverse and Beyond: Kadine James

The metaverse is a vision of what many in the computer industry believe is the next iteration of the internet: a single, shared, immersive, and persistent world.

Through the convergence of the fashion brand with the metaverse and virtual fashion, the metaverse allows the consumer to dive into a far more stimulating and immersive experience that has fashion brands collectively strategising their deliveries, adopting entrance devices and brand deliveries using NFTs or non-fungible tokens.

Moderator: Dr Cigdem Sengul (Brunel University London)

Kadine James is CMO Executive Director at Artificial Rome and Founder of the Immersive KIND. She is a successful serial entrepreneur and expert in all things web3, digital fashion, nfts/ tickens and is cited as a pioneer of the Metaverse. She founded The Immersive KIND in 2016, a Web 3 commerce company, with a mission to bring brands into the metaverse through The Immersive KIND's extended reality studio specialising in virtual reality, augmented reality and immersive production. After working across architecture and data visualisation (AEC) producing virtual tours and immersive worlds for the built environment she dived into the world of advertising at Verizon and Yahoo RYOT and has since worked with some of the most recognised names across fashion, media and the gaming industry.



Military Uses of Artificial Intelligence



Dr Branka Marijan Senior Researcher, Project Ploughshares 4 July 2023 an online event 2 PM-3 PM (UK Time)

Military Uses of Artificial Intelligence: Dr Branka Marijan

As research and development as well as battlefield use of artificial intelligence (AI) continue apace, greater attention to this use is needed. Perceptions about the advantage provided by AI technologies to militaries is shaping the push for the deployment of technologies that may not be ready for war zones.

Regulation, while more vibrant in the last six months, is still lagging and several countries are pushing for voluntary measures. Crucially, the issue is all the more concerning as it is happening against the background of a growing global competition and heightened tensions between the United States and China, where AI dominance is seen as a central aspect. An effective multilevel governance framework is necessary to address the scale of the challenge.

Dr Branka Marijan is a Senior Researcher at Project Ploughshares. She leads the research on the military and security implications of emerging technologies. Her work examines ethical concerns regarding the development of autonomous weapons systems and the impact of artificial intelligence and robotics on security provision and trends in warfare. She holds a PhD from the Balsillie School of International Affairs with a specialization in conflict and security. She has conducted research on post-conflict societies and published academic articles and reports on the impacts of conflict on civilians and diverse issues of security governance, including security sector reform.

Moderator: Dr Asress Adimi Gikay

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Law Enforcement Use of Facial Recognition in the UK— A Normative Regulatory Framework



Dr Asress Adimi Gikay | Brunel University London 12 July 2023 | an online event 2 PM-3 PM (UK Time)

Law Enforcement Use of Facial Recognition in the UK—Is Legal Reform Needed?: Dr Asress Adimi Gikay

The law enforcement use of automated live facial recognition has caused great concern in Europe. UK law enforcement authorities have deployed the technology in publicly accessible spaces in multiple instances. Today, there is an increasing call for more robust regulation and governance. Some scholars and advocacy groups also call for an outright ban on the technology's use by law enforcement authorities.

However, the UK should take a more balanced regulatory approach to reap the technology's benefits in improving public safety while addressing its risk. Based on an in-depth study of laws, policies and practices, I argue that the UK's legal regime requires changes to effectively manage the risks posed by the technology, focusing both on the development and deployment stages.

Moderator: Dr Pin Lean Lau (Brunel University London)

Asress Adimi Gikay is a Senior Lecturer in Al, Disruptive Innovation, and Law at Brunel University London. He is a member of Brunel University Centre for Artificial Intelligence where he co-coordinates the Centre's Thought Leadership Series. He obtained his PhD (with honour) in Individual Person and Legal Protections from Sant'Anna School of Advanced Studies (Pisa, Italy) with thesis focusing on the Regulation of Automated Consumer Credit Assessment in the EU and the US. His current research interest in law, policy and governance of AI, with particular focus on fundamental rights including the privacy implications of AI technologies applied in private and public sectors. He is currently working on a book titled "Artificial Intelligence, Legal Transparency and Accountability" to be published by Routledge.



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