



2-4 October 2024 The ARC & online



Contents

2
3
6
7
9
11
13
14
15
13
17
17
19
21
22
41
- 1
44



Welcome to the Lovelace-Hodgkin Symposium

Welcome to the Lovelace-Hodgkin Symposium on AI Ethics, taking place at the Advanced Research Centre (ARC), University of Glasgow, and online, 2-4th October 2024. We are delighted you can join us. Our vision is rooted in the belief that AI should not exacerbate existing societal inequalities but rather serve as a tool for positive change and community building. We envision a future where AI is developed, deployed and governed in a manner that prioritises fairness, inclusion and social good.

We welcome Keynotes from innovators and leaders, including Professors Leanne Williams (Warwick University) and Jennifer George (Goldsmiths University of London) considering AI in Higher Education, Steph Wright (Head of the Scottish AI Alliance) proposing strategies towards inclusive AI, and Rachel Coldicutt OBE (Head of Careful Industries and Promising Trouble) discussing the societal impacts of AI. We also offer sessions on politics, race, gender, disability, children, and academic integrity. We are delighted that students are integral to this event, participating in a panel discussion with senior university figures and presenting their own work.

We would like to thank all those who have supported the symposium, including Professor Ana Basiri and the Centre for Data Science and AI (initiative funders), the CoSE EDI Committee, and our sponsors LearnSci. We also thank the University of Glasgow Student Learning Development Service, the Learning Innovation Support Unit, the Student Representation Council, and Student Opportunities Hub for invaluable input and help.

We hope you find the symposium energising, thought-provoking, and welcoming. If you require support or have any comments or queries during the event, please email us at lovelacehodgkinsymposium@glasgow.ac.uk, use the **X/Twitter** handle **@LHSymposiumAl** and #glasgowAlethics, or find a member of the symposium team (we'll be wearing Lovelace-Hodgkin Tees). We look forward to meeting you!

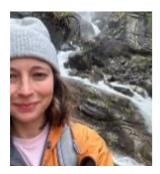
Dr Ciorsdaidh Watts & Dr Lydia Bach

(The Lovelace-Hodgkin Symposium Team)



Meet the Team

<u>Dr Lydia Bach</u> (she/her) – Symposium Co-creator



As the Equality, Diversity and Inclusion Officer within the College of Science and Engineering, I am passionate about improving my work environment, making it inclusive for all irrespective of background. I see myself as an agent of change, leading organisational and cultural transformation by understanding data, highlighting disparities, encouraging

dialogue and setting up initiatives on crucial equality issues.

I see AI as both a tool and a challenge in the pursuit of equality and diversity within academia and beyond. While AI has the potential to enhance accessibility in education and personalise learning, it also poses ethical dilemmas and risks exacerbating existing inequalities. You can follow me on **X/Twitter** by searching for **@LyLuBach**.

<u>Dr Ciorsdaidh Watts</u> (pronounced "Kirsty", she/her) – **Symposium Co-creator**



I am a Senior Lecturer in chemistry at the University of Glasgow. My background is in medicinal chemistry and cancerresearch. I love teaching, having a particular interest in technology-enhanced learning. I am a LearnSci Digital Champion, having worked with this partner industry to deliver online, interactive lab learning across undergraduate teaching.

I am also an advocate for ethics within scientific discourse, and for this reason, one of my role models is Dorothy Hodgkin. Not only did she pursue and achieve excellence in her field, but she also considered human experience and was a proponent of social justice and equality throughout her life. I believe it is essential to think critically about any emerging technology and consider the possible impacts on society, especially marginalised and minority groups. You can follow me on **X/Twitter** by looking for my **@Ciorsdaidh** handle.





Professor Ana Basiri (she/her) – Symposium Facilitator



I am the Director of Centre for Data Science and AI at the University of Glasgow. I hold a Chair in Geospatial Data Science and a UKRI Future Leaders Fellow. I am also leading an interdisciplinary team working on developing theoretical and applied solutions that consider unavailability and biases in data as useful sources of data to make inferences about the underlying reasons that caused

missingness or biases. My Twitter/X handle is @AnahidBasiri.

Dr Sarah Henry (she/her) – **Symposium Logistics**



Sarah received her PhD from University of Glasgow in Molecular Biology and worked as a postdoctoral researcher in the UK and US on artificial photosynthesis. Following a move to Scottish Enterprise as a grant appraisal officer, she returned to University of Glasgow to manage a core facility in mass spectrometry, nucleic acid sequencing and informatics. Sarah resumed her analytic career by working at Scottish Water as a data modeller before taking the manager role at

the Centre for Data Science and Artificial Intelligence.

Ava Scott-Nadal (she/her) – Student Intern Al Ethics



My name is Ava Scott-Nadal and I'm a fourth year Film and Television with Philosophy student. I've been enthralled by contemporary ethics during my degree and have recently finished a summer course in Bioethics at Yale university. Prior to this I was a project assistant for a charity that focuses on promoting AI global governance, in light of its rapid and often unpredictable development. I'm excited to

bring these practical skills to the role. I've been drawn to AI ethics because of how it interacts with healthcare, emerging technologies, and media. I believe AI really does have the ability to change the world. However, it should be approached with strong considerations of equality, fair representation, and inclusion. I look forward to promoting these concepts during my role!





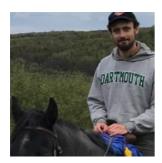
Annie Sassen (she/her) - Student Intern Al Ethics



My name is Annie Sassen and I am the Communications intern within the AI Ethics Course Development team. I am a former fourth grade teacher from Chicago, IL studying for a Master's in Children's Literacies. Within education, the conversation surrounding AI has become increasingly prevalent. I am delighted to join this team and support the

creation of a module and symposium for students and staff within the university to engage on this topic.

Nick Smoliak (he/him) - Student Intern Al Ethics



Hello, I'm Nick. I moved from Canada to the UK in 2019 and initially worked as a chef in London. During Covid, I retrained as a physics teacher, which I did for two rewarding years. Last year, my wife and I moved to Glasgow, where I studied Nuclear and Environmental Physics on the COP26 climate leadership scholarship. Now, I'm about to begin a

PhD with the Deep Nano research group as part of the ElectroMed project, focusing on improving biosensors using machine learning and device simulation methods. My background in teaching and current research on AI led me to engage with the Lovelace-Hodgkin Symposium on AI ethics and the overall pursuit of a framework for the ethical use of AI in higher education and research.

Abbie Thorpe (she/her) – Student Intern Al Ethics



Hi, I'm Abbie, I'm 21 and studying law in 4th year at university! So far within my degree, I have been most drawn to ethical arguments, and so AI is an extremely relevant and contested topic when it comes to discussing morality. I believe we are all aware of the rapid growth of AI, but not all of us talk about it — and we should be talking about it. I am very much looking

forward to learning more and passing on what I know!



Sponsors and Supporters



















About Ada Lovelace and Dorothy Hodgkin

The Lovelace-Hodgkin Symposium is named in honour of two women (born almost 100 years apart) who made significant contributions to the fields of computer technology, science, ethics and inclusion: Ada Lovelace and Dorothy Hodgkin.



Born in 1815, Ada Lovelace was an English mathematician and writer, renowned for her work on Charles Babbage's early mechanical general-purpose computer, the Analytical Engine. She is often considered the world's first computer programmer, creating the first algorithm intended to be carried out by a machine. Lovelace's pioneering insights into computing laid the groundwork for modern computer programming. Unlike many of

her contemporaries, Lovelace considered her work "poetical science" and asked questions beyond simply numerical calculations, about whether the Analytical Machine could be used to examine how individuals and society relate to technology as a collaborative tool. Her legacy continues to inspire generations of scientists and technologists, leading to the establishment of Ada Lovelace Day, taking place a week after our symposium, dedicated to celebrating the achievements of women in STEM fields.



Dorothy Hodgkin was a British chemist whose ground-breaking work in X-ray crystallography revolutionised the field of structural biology. Born in 1910, Hodgkin's research led to the determination of the three-dimensional structures of important biochemical substances, including penicillin and insulin. Her contributions were instrumental in advancing our understanding of molecular structure and function, earning her the Nobel Prize

in Chemistry in 1964. Hodgkin achieved all this while raising a family, overcoming the difficulties of her own disability, and advocating vocally for social equality throughout her adult life.





We had the privilege of interviewing one of Dorothy Hodgkin's highly esteemed students and colleagues, friend of University of Glasgow Chemistry, Marjorie Harding, earlier this year. As Marjorie said of AI, "Dorothy's message would certainly be, 'don't lose sight of the people involved; show care and concern for them too".

Happy 90th birthday Marjorie Harding!

In naming this symposium after Ada Lovelace and Dorothy Hodgkin, we pay homage to their extraordinary intellect, passion for advancing knowledge, humanity and recognition of the inequalities of their time. These two women are inspiration to all who seek to push the boundaries of human understanding and to harness the power of technology for the betterment of society.



Ethos

The Lovelace-Hodgkin Symposium provides a platform for professionals in AI and equality, diversity and inclusion to share their expertise and insights with staff, students, and the wider public. By including the voices of individuals from minority groups and emphasising lived experience, we aim to cultivate a comprehensive understanding of the impact of AI on society. Our purpose is to facilitate meaningful conversations, spark innovative solutions, and foster a community committed to advancing ethical AI practices.

The Lovelace-Hodgkin Symposium team are committed to hosting a diverse, inclusive, accessible, respectful, and welcoming environment for all symposium participants. It is our desire that every participant will feel free to express their ideas, will feel heard, and highly valued. We respect the individual dignity of everyone, irrespective of gender, race, background, or status.

Considering the ethos and values of the symposium, and the enjoyment and safety of our community, all participants, including, but not limited to, attendees, speakers, volunteers, exhibitors and service providers are required to abide by the below Code of Conduct. This Code of Conduct applies throughout the duration of the Lovelace-Hodgkin Symposium, whether attended in person or online.

Code of Conduct

Expected Behaviour:

- Everyone's pronouns will be respected.
- All participants are treated with respect and consideration, valuing a diversity
 of views and opinions.
- Be open, inclusive and collaborative.
- Communicate with respect for others, critiquing ideas rather than individuals.
- Be mindful of your environment and of your fellow participants.
- Be careful not to disclose the personal information of others, without consent.



 Alert the symposium team if you notice an unsafe situation, or someone in distress.

Unacceptable Behaviour:

- Acts of harassment (whether overt or covert), intimidation, or discrimination in any form¹.
- Physical or verbal abuse of any attendee, whether in person or online.
- Sustained disruption of presentations, panel discussions or workshops (whether in person or online).
- Anyone requested to stop unacceptable behaviour is expected to comply promptly.

Safe Reporting Procedure:

- If you are the subject of, or have witnessed unacceptable behaviour at the
 event, please immediately notify a member of the symposium team (Dr
 Ciorsdaidh Watts or Dr Lydia Bach) in-person or by email if attending virtually
 (LovelaceHodgkinSymposium@glasgow.ac.uk).
- Anyone experiencing/witnessing behaviour that constitutes an immediate or serious threat to public safety is advised to call 999 and +44 (0)141 330 4444 for internal university security.

¹ Harassment includes (but is not limited to): physical intimidation, abusive or offensive language (including in text format), following, stalking, bullying, repeated and aggressive disruption of discussions, sexual harassment, hate speech.



Access and Support

Location

The symposium will take place in Room 226, Researcher Development Suite (RDS), on Level 2 (ground floor) of the ARC, University of Glasgow. The ARC is located at 11 Chapel Lane, University of Glasgow, G11 6EW, <u>Google maps.</u>

Accessibility

The RDS on Level 2 of the ARC has **step-free access**. This extends to all publicly available locations on Level 2. Room 224 within the ARC has been booked for the duration of the symposium as a **quiet space** open to all attendees.

Accessible and ambulant **toilets** are available throughout the ARC, as are gender neutral toilets. There is a Changing Places toilet located on Level 1, the lower ground floor (please ask at reception for further information).

Infant feeding and changing facilities are available on Level 2. This includes access to a fridge, microwave, bottle warmer and sink. Please ask a member of the symposium team for any support required.

Assistance dogs are welcome in the ARC. Water bowls can be provided at reception.

All **microphones** used in the ARC work in conjunction with an infrared hard of **hearing system**. To use the system, please set your hearing device to the T setting.

The closest **Blue Badge parking** is located on University Place. Please contact ARCEnquiries@glasgow.ac.uk if you need to arrange accessible drop-off and parking immediately next to the ARC.

For further queries on accessibility at the ARC, please contact ARCEnquiries@glasgow.ac.uk or call the ARC reception on +44 (0)141 330 4170.



Support

If you require support during the event, please contact a member of the symposium team, who will aim to direct you to the most appropriate service.

Menstrual Health

Dr Millie Bombard (Scottish Universities Environmental Research Centre, SUERC) and creator of the *Going with the Flow* initiative, which aims to create a more inclusive environment for all participating in field work, will be present at the symposium to offer menstrual health support to anyone seeking it.

Spiritual Support

The University of Glasgow Chaplaincy (https://www.gla.ac.uk/myglasgow/chaplaincy/) provides spaces for prayer and reflection across campus. These include:

Chaplaincy Prayer and Reflection Room

Open weekdays from 9am – 5pm, located on Level 1, Main Building. The space includes ablution facilities, prayer space and a reflection area.

Memorial Chapel

Open weekdays from 9am – 5pm for individual prayer and contemplation.

Catholic Chaplaincy, Turnbull Hall

13-15 Southpark Terrace G12 8LG. Open weekdays, the Catholic Chaplaincy includes a cafe, common room, computer room and a chapel where Mass is celebrated each day.

Clarice Pears Building Faith Room, Level 1, Room 131

Open weekdays 9am – 5pm for visitors, students and staff. It is a peaceful, intimate space for meditation, reflection and prayer. Designed to be inclusive of all faiths and beliefs (including two separate ablutions rooms.)





Catering

We want the food we share with attendees at the symposium to reflect our overall vision for the event. We seek to amplify the voices and achievements of minority groups and focus on social inclusion and diversity. We also know how important great food is! For these reasons, we've partnered with Glasgow-based social enterprise **Soul Food Sisters** (https://www.soulfoodsisters.org/), who will be catering the entire event.



Soul Food Sisters is a female-led collective run by migrant women from all over the world. The Sisters believe that by sharing recipes, ideas and skills, they can create brighter futures for themselves and others, reduce social isolation, and make a positive impact on communities. Soul Food Sisters also make ethically sourced food a priority, buying local where possible and working with other community co-ops. We have worked hard to provide menus at the symposium that meet the dietary needs and preferences of all our attendees, and we hope you love Soul Food Sisters food as much as we do! You can follow Soul Food Sisters on Instagram @soulfoodsisters

Food Waste

Because we know that food waste can be a problem at big events, and because we know that students can struggle to access food, we have partnered with **GUEST** (Glasgow University Environmental Sustainability Team) to ensure that any uneaten symposium food will go directly to students on campus.



Media

Photography and Visual/Audio Recording

All speaker sessions/panel discussion will be recorded and made available to symposium attendees after the event, with associated transcripts. Slides from each presenter will also be made available. Attendees are welcome to take photographs and make recordings throughout the event, but we would kindly ask that you avoid flash photography during speaker presentations.

The symposium is being attended both in person and online. Online attendees will be using our Zoom webinar resource to attend. We will have dedicated online technical support in place each day. We will also be capturing online engagement with presentations, workshops, and question sessions throughout the symposium.

We will be taking photographs throughout the symposium, to capture the event visually. If for any reason, you do not wish to be included in photographs, please just let one of the Symposium Team know.

Social Media

Join the conversation by tagging

@LHSymposiumAl and

#glasgowAlethics

on X/Twitter



Useful Resources

Podcasts

The Good Robot Podcast: This podcast hosts conversations about gender, race and Al. Dr Kerry McInerney and Dr Eleanor Drage employ feminist and critical race theory to explore how histories of race and gender shape modern technologies, with a specific emphasis on Al.

Machine Ethics Podcast: This podcast features interviews with a range of individuals, including academics, authors, business leaders, designers and engineers, covering topics such as autonomous algorithms, AI, machine learning and the societal impacts of technology.

Books

Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence (Kate Crawford, Yale University Press, 2021): In this book Kate Crawford, award-winning scholar, offers insights from more than a decade of research. She suggests AI functions as a technology of extraction, from the minerals mined from the earth to the labour provided by low-wage information workers and the data sourced from our actions and expressions.

Al by Design: A Plan for Living with Artificial Intelligence

(Catriona Campbell, Chapman & Hall, 2022): This book introduces us to Artificial Intelligence and its importance to our future. The author uses behavioural psychology, explores technology, economics, real-life and historical examples to predict five future scenarios with Al. This book explains how to design for a future with Al so that, rather than herald our downfall, it helps us achieve a new renaissance.

Ethics and Artificial Intelligence: Towards a Moral Technology (Domenico Marino, Daniele Cananzi, and Filippo Aragona, Springer, 2024): This book provides a review of the relationship between Al and ethics. It discusses the ethical



responsibilities of machines that learn and make autonomous decisions and explores the viewpoints of both techno-optimists and pessimists in AI.

Films

Her (2013): This film explores themes of loneliness and connection in a highly technological world. Director Spike Jonze brings out the emotional complexities of an unconventional relationship with AI.

Ex Machina (2014): This film examines the ethical implications of creating conscious AI. It raises questions about the boundaries between humans and machines, and the responsibilities of creators.

Videos

Ethics of Al: Challenges and Governance, UNESCO 2023: This short 7-minute video discusses how to harness Al's potential while ensuring it does not exacerbate existing inequalities and biases or create new ones.

A Conversation with Dr Joy Buolamwini, SXSW 2024: Dr Joy Buolamwini sheds light on how we have arrived at an era where Al can perpetuate harms and oppression. Despite appearing as if recent Al developments emerged suddenly, these advancements have deep-rooted histories and potential biases.



Programme

Click here to access the full symposium programme online.

Day 1 (2nd Oct) Programme



Please scan the QR code on the left or <u>click here</u> to submit your questions or thoughts to the panel. The **panel discussion** (Day 1, 2nd Oct) will focus on AI use in Higher Education teaching and research.

Day 1 (October 2nd 20)	24, Room 226, Research Development Su Centre, University of Glasgov	ite, Level 2 (Ground Floor), Advanced Research v and online
Schedule (UK Summer Time)	Session	Session Details
9:15am-9:40am	Registration	Say hello at the registration desk and collect your symposium pack
9:40am-10:00am	Welcome - Professor Ana Basiri (Professor of Geospatial Data Science & Director of the Centre for Data Science and AI, University of Glasgow)	Professor Basiri will open Day 1, welcome attendees, and outline our collective purpose, aims, and ethos
10:00am-10:50am (40mins + 10 mins Questions	Keynote Presentation - Professor Leanne Williams (Professor of Biosciences, University of Warwick & Academic Lead, LearnSci)	Student experience and understanding of AI across academia in the UK
10:50am-11:10am Morning Refreshments	Break and Networking	Refreshments will be available behind the ARC reception, with time to refill, refresh, and network
11:10am-11:40am (20mins + 10mins Questions)	Presentation - Professor Michael Seery (University of Bristol/Open University)	Ethics of care frameworks in HE, accessibility of AI and student impacts
11:40am-12:10pm (20mins + 10mins Questions)	Presentation - Ms Maud Stiernet (Co- chair of International Accessibility for Children Community Group)	Navigating Tensions and Personalising Accessibility from the Inside Out
12:10pm-12:30pm (15mins + 5mins Questions)	Presentation - Dr Tiffany Vlaar, Dr Catherine Reid (University of Glasgow)	Coding, creativity and confidence in the Generative Artificial Intelligence era
12:30pm-1:50pm Lunch	Break and Networking	Lunch will be available behind the ARC reception, with time to refill, refresh, and network





1:50pm-2:40pm (40mins + 10mins Questions)	Keynote Presentation - Professor Martin Hendry (Vice-Principal Academic Services, University of Glasgow)	Students, ethics and information seeking in an Al-driven world
2:40pm-3:00pm (15 mins + 5 mins Questions	Presentation - Dr Vinny Davies, Dr Jennifer Gaskell (University of Glasgow)	Assessment in the age of generative AI
3:00pm-3:40pm (30mins + 10 mins Questions)	Presentation - Dr Andrew Struan, Dr Scott Ramsay, Dr Emily Nordmann (Student Learning Development and Psychology, University of Glasgow)	Al and the 'other' Al: academic integrity
3:40pm-4:00pm Afternoon Refreshments	Break and Networking	Refreshments will be available behind the ARC reception, with time to refill, refresh, and network
4:00pm-5:00pm	Panel Discussion - use of AI in research and teaching	Glasgow students, Heri Busquier Cerdan (Students' Representation Council Vice- President Education), Professor Martin Hendry (Vice-Principal Academic Services, University of Glasgow), Professor Chris Pearce (Vice-Principal Research & Knowledge Exchange, University of Glasgow), Professor Moira Fischbacher-Smith (Vice-Principal Learning & Teaching, University of Glasgow),
5:00pm-5:15pm	Closing remarks - Professor Ana Basiri (Professor of Geospatial Data Science & Director of the Centre for Data Science and AI, University of Glasgow)	Day 1 summary and closing remarks



Day 2 (3rd Oct) Programme

Day 2 (October 3rd 202	24, Room 226, Research Development Su Centre, University of Glasgov	ite, Level 2 (Ground Floor), Advanced Research v and online
Schedule (UK Summer Time)	Session	Session Details
9:15am-9:30am	Welcome & Reflection - Professor Ana Basiri (Professor Geospatial Data Science & Director Centre for Data Science and AI, University of Glasgow)	Professor Basiri will open Day 2, welcome attendees, and outline our collective purpose, aims, and ethos
9:30am-10:20am (40mins + 10mins Questions)	Keynote Presentation - Ms Steph Wright (Head of Scottish AI Alliance)	Delivering on Scotland's vision for trustworthy, ethical and inclusive Al and why does it matter?
10:20am-10:50am (20mins + 10mins Questions)	Presentation - Dr Chris Burr (Innovation & Impact Hub Lead, The Alan Turing Institute)	Trustworthy and Ethical Assurance: a practical approach to the responsible design, development, and deployment of data-driven technologies
10:50am-11:10am Morning Refreshments	Break and Networking	Refreshments will be available behind the ARC reception, with time to refill, refresh, and network
11:10am-12:10pm (50mins + 10mins Questions)	Presentations - Professor Muffy Calder, Dr Simone Stumpf, Dr Mark Wong (University of Glasgow)	Supporting stakeholders to assess AI: Using the PHAWM approach to develop Responsible AI; Building trustworthy and responsible AI through co-design with adversely racialised people
12:10pm-12:40pm (20mins + 10mins Questions)	Presentation - Dr Kerry McInerney (Research Associate Leverhulme Centre for the Future of Intelligence)	The Good Robot: Why Technology Needs Feminism
12:40pm-1:30pm Lunch	Break and Networking	Lunch will be available behind the ARC reception, with time to refill, refresh, and network



1:30pm-2:00pm (20mins + 10 mins Questions)	Presentation - Ms Oyidiya Oji (Digital Rights Adviser, European Network Against Racism)	Ingredients for community centred policies in Al
2:00pm-2:30pm (20mins + 10 mins Questions)	Presentation - Dr Michael Townsen Hicks, Dr James Humphies, Dr Joe Slater (University of Glasgow)	ChatGPT, "Bullshit", and Anthropomorphising Al
2:30pm-3:20pm (40mins + 10mins Questions)	Keynote Presentation - Professor Jennifer George (Professor of Computing, Goldsmiths University of London)	The Role of Disability, Religion, and Belief in the Ethics of AI
3:20pm-3:40pm Afternoon Refreshments	Break and Networking	Refreshments will be available behind the ARC reception, with time to refill, refresh, and network
3:40pm-4:10pm (20mins + 10 mins Questions)	Presentation - Dr Mhairi Aitken (Ethics Fellow, The Alan Turing Institute)	Advancing Child-Centred AI: The role of children in shaping AI for today and tomorrow
4:10pm-4:40pm (20mins + 10 mins Questions)	Presentation - Samantha Gibbons, Andy Muir, Dr Stewart White (University of Glasgow)	AI Ethics and Biodiversity
4:40pm-5:00pm	Closing remarks	Day 2 summary and closing remarks





Day 3 (4th Oct) Programme

farewell	Lunch will be available behind the ARC reception, with time to refill, network and say farewell	ARC reception, with tir	be available behind the	Lunch will	Break and Farewell	1:00pm-1:30pm Lunch
ethics of Al	ctions on the event and the ethics of AI	MSP Clare Adamson will close the symposium with her reflections	damson will close the sy	MSP Clare A	Closing Remarks - MSP Clare Adamson	12:50pm-1:00pm
эроse workable routes	Work with our facilitators and the symposium team to identify priority AI ethical outcomes and propose workable routes towards these	eam to identify priority. towards these	rs and the symposium t	Work with our facilitato	Output Collaboration	11:20am-12:50pm
nd network	Refreshments will be available behind the ARC reception, with time to refill, refresh, and network	nd the ARC reception, v	its will be available behi	Refreshmer	Break and Networking	11:00-11:20am Morning Refreshments
Online: Disability & child-centred AI with Maud Stiernet (Cochair of International Accessibility for Children Community Group)	Room 225: Disability & Al with Professor Leanne Williams (Professor of Earning Innovation and Biosciences, University of Warwick & Academic Lead, LearnSci) Room 226: Al ethics & HE with John Kerr (Assistant Director Digital Education, Learning Innovation and Support), Dr Scott Ramsay & Dr Andrew Struan (Student Learning Development)	Room 225: Disability & AI with Professor Leanne Williams (Professor of Biosciences, University of Warwick & Academic Lead, LearnSci)	Room 224: Race & AI with Oyidiya Oji (Digital Rights Adviser, European Network Against Racism)	Room 223: Al policy & Tech with Dr Chris Burr (Innovation & Impact Hub Lead, The Alan Turing Institute)	Group Workshops	9:30am-11:00am
ims, and ethos	ne our collective purpose, aims, and ethos	Professor Basiri will open Day 3, welcome attendees, and outline our	will open Day 3, welco	Professor Basir	Welcome & Reflection - Professor Ana Basiri (Professor Geospatial Data Science & Director Centre for Data Science and Al, University of Glasgow)	9:15am-9:30am
		Session Details			Session	Schedule (UK Summer Time)
entre, University of	Floor), Advanced Research Centre, University of	ıdio 2, Level 2 (Ground l	velopment Suite and Stu	4, 225, 226 Research De	Day 3 (October 4th 2024, Rooms 223, 224, 225, 226 Research Development Suite and Studio 2, Level 2 (Ground Floor), a	Day 3 (October

Meet the Speakers / Presentation Abstracts

<u>Dr Mhairi Aitken</u> (she/her)



Dr Mhairi Aitken is Senior Ethics Fellow in the Public Policy Programme at The Alan Turing Institute, a Visiting Senior Lecturer at the Digital Environment Research Institute, Queen Mary University of London and an Honorary Senior Fellow at the University of Wollongong, Australia. At the Alan Turing Institute Mhairi leads research on children and AI, as well as

working across a range of topics including data justice, ethics of Generative AI and emerging AI policy and regulation. Mhairi was included in the 2023 international list of "100 Brilliant Women in AI Ethics" and is a frequent contributor to media discussions around AI and data.

Presentation Title: Advancing Child-Centred AI: The role of children in shaping AI for today and tomorrow

Presentation Abstract: Children are the group who may be most impacted by developments in AI, but they are also the group that is least represented in decision-making around the design, development and deployment of AI, or in policy-making and regulation on AI. That needs to change. This talk will explore children's relationships with AI and provide examples of the ways in which children can and should be involved in shaping the future of AI, arguing that responsible and ethical approaches to AI must centre the rights and interests of children.

Dr Christopher Burr (he/him)



Dr Christopher Burr is a Senior Researcher in Trustworthy
Systems (TPS Programme) and Lead for the Innovation and
Impact Hub (Turing Research and Innovation Cluster in Digital
Twins). As of February 2024, he is principal investigator for a
UKRI-funded project on <u>Trustworthy and Ethical Assurance of</u>
<u>Digital Twins</u>, in collaboration with the University of York's
Centre for Assuring Autonomy and the Responsible Technology

Adoption Unit (Department for Science, Innovation, and Technology). He specialises in the trustworthy and ethical design, development, and deployment of data-driven





technologies. He is also interested in exploring and understanding how data-driven technologies affect our decision-making and social institutions (e.g. factors that undermine trust in algorithmic systems).

Presentation Title: Trustworthy and Ethical Assurance: a practical approach to the responsible design, development, and deployment of data-driven technologies Presentation Abstract: There has been significant discussion in AI ethics about how to operationalise normative principles (i.e. to put them into practice) and make them usable and useful for a range of practitioners (e.g. data scientists, ML engineers, social scientists, policymakers). This has led to a proliferation of methods, tools, and techniques, such as software packages for interpreting ML models or assessing their fairness. Although a welcome development, it has also created some confusion about which of the many methods are best suited to a given project, based on the project's over-arching goals and objectives (e.g. to create an explainable Al system). The Trustworthy and Ethical Assurance (or TEA) platform seeks to provide an open and community-centred forum for helping practitioners address these ethical challenges, by constructing and sharing structured assurance cases that a) demonstrates how specific principles have been realized in the context of their project, b) establishes a set of claims to help specify this task, and c) provides the specific forms of evidence that justify their claims. In this presentation, I will introduce the TEA platform, the methodology and provide an illustrative example to help motivate its value and use.

Professor Muffy Calder (she/her)



Muffy Calder has been Vice-Principal and Head of College of Science and Engineering, University of Glasgow, since 2015, previously she was the Chief Scientific Adviser for Scotland. She is a computer scientist with research interests in modelling and automated reasoning for complex, interactive, and sensor-driven systems, responsible AI, and privacy intrusion and national security. She is on the executive team

of RAi UK, a member of the Prime Minister's Council for Science and Technology and was deputy chair of REF Main Panel B. Previously, she was a member of





UKRI-EPSRC council, a Royal Society Leverhulme Research Senior Fellow, and a Suffrage Science award winner in Computing Science and Mathematics.

Professor Jennifer George (she/her)



Jennifer is a Professor of Computing and a National Teaching Fellow. She has been a teacher/lecturer since 1995 and has worked across Sri Lanka and UK. Jennifer's academic and research background includes human-computer interaction; theology and the digital world and inclusion and accessibility in learning, teaching and assessments. She is passionate about

disability inclusion and accessibility and has led initiatives to increase inclusion at department, school, institutional and international levels. Her work has had an impact on student and staff experience at institutional policy and strategy levels across multiple institutions. During her recent five years at Goldsmiths, she has been either Head or Deputy Head of the Department, led on making the department disability inclusive and taught and supervised students in various areas of Human-Computer Interactions. She has a keen interest in pedagogy and technology-enhanced learning and was previously the academic lead for learning technologies and digital media at Anglia Ruskin University.

Presentation Title: The Role of Disability, Religion, and Belief in the Ethics of Al **Presentation Abstract:** While most universities now ensure gender and race representation in groups and committees, academics are often expected to conform to specific views, particularly in public settings, regardless of their backgrounds, experiences, or personal beliefs. This conformity maintains efficiency and avoids confrontation but can undermine genuine inclusivity. True inclusivity requires that every group member takes the time to listen to and consider diverse perspectives to foster inclusive decision-making.

Religion and belief are deeply intertwined with politics, which influences legislation and societal change. Despite universities presenting what are considered the "correct" views, there is often a lack of practice in listening to diverse perspectives on religion and belief. This practice is crucial in designing AI, where ethics is guided by legislation shaped by politics, which in turn is influenced by religion and belief.





The definition of disability has transitioned from a medical model to a social model, and individuals with disabilities have benefited from advancements in AI as assistive technology. However, they have also faced discrimination from technologies developed without their involvement, leading to additional research and campaigns against such technologies. Legislation on accessibility and AI continues to evolve in response.

University ethical committees are typically composed of subject-matter representatives and driven by GDPR, risk assessments and compliance. This talk will explore case studies of AI concerning disability, religion, and belief, and the role these protected characteristics play in ethical considerations to advance AI by adopting a genuinely inclusive approach.

If you are interested in some pre-reading before this session, Jennifer recommends exploring Elon Musk's Neuralink case study: https://neuralink.com/blog/prime-study-progress-update/ and following some of the associated chatter on X/Twitter.

We are pleased to share Professor <u>Jennifer George's keynote presentation</u> for the upcoming Lovelace-Hodgkin Symposium. Due to scheduling constraints, Jennifer may not be available to answer questions live. However, Jennifer has kindly provided us with her presentation, which you can now access in advance.

We encourage you to view the PowerPoint and submit any questions before the event. Questions will be forwarded to Jennifer so she can answer them beforehand.

Sam Gibbons (she/her)



Samantha (Sam) Gibbons (she/her) is a 3rd year
Biochemistry student and is a dedicated advocate for
environmental sustainability and biodiversity conservation.
As a staff member of the Glasgow University Environmental
Sustainability Team (GUEST), Sam has previously worked
as the Biodiversity Promoter and is currently employed as
the Community Engagement Promoter. Her work has

included hosting iNaturalist BioBlitz events, coordinating biodiversity workshops, and leading the Wildlife Gardens Rewilding Project. With extensive experience in environmental education, Sam brings a unique perspective to the intersection of AI ethics and biodiversity.





Presentation Title: Al Ethics and Biodiversity

Presentation Abstract: Join Sam and Andy, the Community Engagement and Biodiversity Promoters from the Glasgow University Environmental Sustainability Team (GUEST), to explore the role of artificial intelligence in biodiversity through iNaturalist. Learn how the platform creates community, enhances mental and physical health, and supports scientific studies like climate change and invasive species. We'll also discuss biases in data collection and connect generations through real-time documentation of local wildlife.

Professor Martin Hendry (he/him)



Martin Hendry is Vice-Principal and Clerk of Senate, at the University of Glasgow, and is responsible for the governance of academic policy and practice, as well as for academic standards, across the University.

Martin is also Professor of Gravitational Astrophysics and Cosmology in the School of Physics and Astronomy, where he was Head of School from 2012 to 2020.

Martin is a Fellow of the Institute of Physics and the Royal

Society of Edinburgh, and is currently Vice President of the RSE and chair of the RSE's Learned Societies Group on Scottish STEM Education.

Presentation Title: Students, ethics and information seeking in an Al-driven world

<u>Dr Michael Townsen Hicks</u> (he/him)



Michael Townsen Hicks is a lecturer in philosophy of science and technology at the University of Glasgow. He has previously held research positions at the University of Oxford, the University of Cologne, and the University of Birmingham. His research focuses on the way we use scientific theories, especially theories in physics, to

understand what is possible, as well as the way we communicate about scientific theories and novel technologies.



Presentation Title: ChatGPT, "Bullshit", and Anthropomorphising Al

Presentation Abstract: Large Language Models (LLMs) and other machine learning systems seem very human, so much so that it's tempting, and perhaps unavoidable, to use anthropomorphic metaphors when discussing their outputs and behaviour.

One particularly pernicious metaphor is the 'Al Hallucination': the false outputs of LLMs such as ChatGPT are often described as 'Hallucinations' and 'Confabulations', which suggest that in their normal function these systems have accurate representations of the world which they are attempting to communicate to their human users. We argue that these metaphors are inapt and suggest a replacement: "Bullshit". In the course of the talk, we will discuss how the systems work, and show how their functioning aligns directly with Harry Frankfurt's account of bullshitting. We will also discuss the utility of anthropomorphic metaphors in science and technology communication, with a focus on how they can be used to convey the function of new technology to a nontechnical audience.

Dr James Humphries (he/him)



James Humphries is a lecturer in political theory at the University of Glasgow, specialising in autonomy, political obligation and justice, as well as anarchist and Marxist theory. Recently, he has also been working on Al.

Presentation Title: ChatGPT, "Bullshit", and Anthropomorphising AI

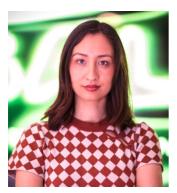
Presentation Abstract: Large Language Models (LLMs) and other machine learning systems seem very human, so much so that it's tempting, and perhaps unavoidable, to use anthropomorphic metaphors when discussing their outputs and behaviour. One particularly pernicious metaphor is the 'AI Hallucination': the false outputs of LLMs such as ChatGPT are often described as 'Hallucinations' and 'Confabulations', which suggest that in their normal function these systems have accurate representations of the world which they are attempting to communicate to their human users. We argue that these metaphors are inapt and suggest a replacement: "Bullshit". In the course of the talk, we will discuss how the systems work, and show how their functioning aligns directly with Harry Frankfurt's account of bullshitting. We





will also discuss the utility of anthropomorphic metaphors in science and technology communication, with a focus on how they can be used to convey the function of new technology to a nontechnical audience.

Dr Kerry McInerney (she/her)



Dr Kerry McInerney (née Mackereth) is a Senior Research Fellow at the Leverhulme Centre for the Future of Intelligence at the University of Cambridge, where she coleads the Global Politics of AI project on how AI is impacting international relations. She is also a Research Fellow at the AI Now Institute (a leading AI policy thinktank in New York) and a Visiting Fellow at the Institute of Advanced Studies,

UCL for 2023-2024. Kerry's work explores the intersections between race, gender, political violence, and artificial intelligence. Her work has been published or is forthcoming in Signs, Big Data and Society, New Media and Society, Philosophy and Technology, Public Understanding of Science, Feminist Review, Ethics and Information Technology, Gender, Place and Culture, and the National Political Science Review. Kerry is the co-editor of the collection Feminist AI: Critical Perspectives on Algorithms, Data, and Intelligent Machines (2023, Oxford University Press), the collection The Good Robot: Why Technology Needs Feminism (2024, Bloomsbury Academic), and the co-author of the forthcoming book Reprogram: Why Big Tech is Broken and How Feminism Can Fix It (2026, Princeton University Press).

Kerry is an AHRC/BBC New Generation Thinker (2023), one of the 100 Brilliant Women in Al Ethics (2022), one of Computing's Rising Stars 30 (2023), and she has been shortlisted for the Champion of Women - Champion of Innovation (2022), Women of the Future - Technology and Digital (2022), and Women in Tech Excellence - Rising Star (2022) awards. She co-hosts the Good Robot podcast on feminism, gender and technology, and has appeared on popular shows such as BBC World Service, The Daily Zeitgeist, BBC Radio 3's Free Thinking, The Guilty Feminist, BBC Cambridgeshire, and the Colin McEnroe show. Her work has also been covered worldwide by media outlets like the BBC, BBC Today, Forbes, the Register, The Guardian, the Telegraph, The Daily Mail, BBC Tech Tent, and many other international outlets.





Presentation Title: The Good Robot: Why Technology Needs Feminism **Presentation Abstract:** What is good technology? Is it even possible? And how can feminism help us work toward it? Join Kerry McInerney, Senior Research Fellow at the Leverhulme Centre for the Future of Intelligence at the University of Cambridge, as she discusses these crucial questions and her book, The Good Robot: Why Technology Needs Feminism (edited with Dr Eleanor Drage). McInerney is the cohost of "The Good Robot" podcast and co-editor of Feminist AI: Critical Perspectives on Algorithms, Data and Intelligent Machines. In her talk, she first explores the question of good technology, and how to grapple with polarising narratives of Silicon Valley techno-optimism and extreme techno-pessimism. Next, Kerry details her approach to feminist thinking and its relationship with Al and other data-driven technologies. She explains why feminism matters so much in the fields of Al and data science, and gives tangible examples of what feminist approaches to technology look like in these fields. She then delves into five different arenas where feminist thinkers, activists and technologists are bringing feminism to bear on Al and data science: human-Al relationships; Al systems; Al design; Al narratives; and resistance to Al.

Dr Emily Nordmann (she/her)



Emily Nordmann is a teaching-focused Senior Lecturer and the Deputy Director of Education for the School of Psychology and Neuroscience at the University of Glasgow. Emily is Year 1 Lead and predominantly teaches study skills, research methods, and programming in R. Emily is a vocal advocate of open science and open educational resources. As a member of the PsyTeachR team she has

authored several open-access data skills books and tutorials including the most recent Al TutoR.

Presentation Title: All and the 'other' Al: academic integrity

Presentation Abstract: Our paper will look at the guiding principles of use of AI for students at the University of Glasgow and a case study of their implementation. We will discuss the university-wide guidance and resources provided to our students, and discuss a specific example from first-year psychology in the use of a scaffolded-





in approach to AI in assessments. Our paper highlights the need to provide students with clear guidance and information on the use of AI, alongside meaningful activities that allow students to engage with, test and critique AI outputs.

Oyidiya Oji (she/her)



Oyidiya Oji is Policy and Advocacy Advisor for Digital Rights at the European Network Against Racism (ENAR). She focuses on advocacy on the Al Act and related digital rights portfolios. She defends a transversal and sustainable relationship with EU institutions with a racial equality lens. Previously, she researched and mapped projects of resistance and reappropriation of technology,

with a special focus on AI. She was also part of artivism and digital community building collectives and organised monthly meetings with people from underrepresented backgrounds in tech from across the globe.

Presentation Title: Ingredients for community centred policies in Al

Presentation Abstract: Europe is making its own steps to regulate Al and lead the
initiative, but are these movements enough to protect us against societal
inequalities? We will delve into the importance of social and racial justice frameworks
to support and reinforce community centred Al policies.

Dr Scott Ramsay (he/him)



Scott Ramsay is Deputy Head of Student Learning
Development (Sciences, Mathematics and Statistics) at the
University of Glasgow. Since 2012, he has worked variously
as the Good Practice Adviser in L&T for the University, and
the Effective Learning Adviser for students in the College of
Medical, Veterinary & Life Sciences. With a PhD in Molecular
Biology, Scott manages a team of Effective Learning Advisers

and Maths & Stats Advisers. Andrew Struan and Scott are part of a team currently developing a MOOC (Massive Open Online Course) on the use of generative AI with ethics and academic integrity.





Presentation Title: Al and the 'other' Al: academic integrity

Presentation Abstract: Our paper will look at the guiding principles of use of AI for students at the University of Glasgow and a case study of their implementation. We will discuss the university-wide guidance and resources provided to our students, and discuss a specific example from first-year psychology in the use of a scaffolded-in approach to AI in assessments. Our paper highlights the need to provide students with clear guidance and information on the use of AI, alongside meaningful activities that allow students to engage with, test and critique AI outputs.

Dr Catherine Reid: (she/her)



Catherine Reid (she/her) is a lecturer at the University of Glasgow with research interests in high ability, intelligence and educational equity and inclusion in secondary and higher education. Prior to this, she spent 23 years teaching in Scottish secondary schools with high levels of deprivation and completed her PhD at the University of Glasgow. Catherine is part of the

Scottish Network for Able Pupils, working with schools and policymakers.

Presentation Title: Coding, creativity and confidence in the Generative Artificial Intelligence era

Presentation Abstract: Generative Artificial Intelligence (AI) — with large language model (LLM) ChatGPT as a well-known example — is gradually becoming integrated into everyday life. A relatively underexplored research area is how its usage may pose new challenges to students' learning process for solving coding problems. We propose an intervention to empower the use of AI without loss of problem-solving expertise, avoid the blind use of these tools, and promote the joy of learning. The outcome of this intervention will explore current students' understanding of AI and serve as a basis for developing new pedagogies with relevance for both higher education and beyond.





Professor Michael Seery (he/him)



Michael Seery is Deputy Director and Head of International Foundation Programme at the Centre for Academic Language and Development, University of Bristol, and am also a Visiting Professor at the Open University. He is interested in curriculum design and academic literacies, and in this context regarding how and why we may incorporate AI

into university education. Website: Michael Seery

Presentation Title: Ethics of care frameworks in HE, accessibility of Al and student impacts

Presentation Abstract: How should we incorporate AI into our curricula? While the academy is working hard and well on thinking about AI literacy, an open question remains as to what we share the purpose of AI to be, and where it appears in the curriculum. In this talk I bring together two broad considerations: (1) the challenge of integrating a new "transferable skills" dimension into our curricula and (2) the lessons learned from the extent of learning that actually occurs from a curriculum component deeply embedded (in my case laboratory work). From these components, I think it is worthwhile to ask what is our duty of care to students to ensure that we are clear why we want to incorporate AI into our curricula, and subsequently how we go about doing it.

Dr Joe Slater (he/him)



Joe Slater is a lecturer in moral and political philosophy at Glasgow. His research is primarily within normative and applied ethics. He has recently published on questions about the rationality of sports fans, the permissibility of abortion, whether juries are a good method for assessing guilt in criminal trials, and the extent of our duties to the global poor.

Presentation Title: ChatGPT, "Bullshit", and Anthropomorphising Al **Presentation Abstract:** Large Language Models (LLMs) and other machine learning systems seem very human, so much so that it's tempting, and perhaps unavoidable,



to use anthropomorphic metaphors when discussing their outputs and behaviour. One particularly pernicious metaphor is the 'Al Hallucination': the false outputs of LLMs such as ChatGPT are often described as 'Hallucinations' and 'Confabulations', which suggest that in their normal function these systems have accurate representations of the world which they are attempting to communicate to their human users. We argue that these metaphors are inapt and suggest a replacement: "Bullshit". In the course of the talk, we will discuss how the systems work, and show how their functioning aligns directly with Harry Frankfurt's account of bullshitting. We will also discuss the utility of anthropomorphic metaphors in science and technology communication, with a focus on how they can be used to convey the function of new technology to a nontechnical audience.

Maud Stiernet (she/her)



Maud Stiernet is a consultant in Responsible Artificial Intelligence, Accessibility and Children's Rights. She started her career in the Tech sector and then specialised in children's online rights and more specifically children with specific needs using technology to participate and contribute to the online world. Maud is co-chair of the W3C Accessibility for Children Community. She organises inclusive workshops for children to increase Al literacy, safety,

and empowerment and is part of the ICT expert Committee for the <u>European Disability Forum</u>. She is a member of <u>Al4Belgium | Eurochild | For Humanity | International Association of Accessibility Professionals</u>

Contact <u>Linkedin | maud.stiernet@alittleliningcomes.com</u>

Presentation Title: Navigating Tensions and Personalising Accessibility from the Inside Out

Presentation Abstract: "The OECD states that almost one-fifth of students may develop a special educational need during their schooling years". This statistic captures the evolving nature of specific needs over time. Against this backdrop, Artificial Intelligence (AI) systems offer new ways to assist both students and teachers in inclusive education. However, international disability organizations and educational reports—reflecting the perspectives of parents and teachers—highlight a



nuanced landscape with both opportunities and challenges, emphasizing the need for cautious consideration.

Through this presentation, we present some strategies to navigate through a sea of AI systems:

- 1. **Representation and Voices**: Consider the perspectives of children with specific needs, including users, contributors, and developers.
- 2. **Audits and Quality Management**: Regularly monitor Al systems, addressing context-related biases and ensuring child-specific frameworks.
- 3. **Universal Design for Online Protection**: Prioritize accessibility, personalization, privacy, and relevant indicators.
- 4. **Al and Assistive Tech Literacies**: Promote understanding and proficiency in Al and assistive technologies.
- 5. **Educational Technologies**: Conduct reviews and benchmarks to enhance inclusion.

And provide some guidance to monitor the well-balanced characteristics of the ecosystem:

- **Inclusion Realities**: How do we recognize and value invisible, dynamic abilities when discussing inclusion?
- Al's Role in Skills Development: Are Al systems equally effective in supporting reading skills and STEM skills for children with specific needs?
- Measuring Al Impact: How can we measure the impact of Al on children with specific needs in education?
- Standards and Learning Opportunities: How do technical standards enhance students' learning experiences?
- Al's Place in Inclusive Education: How does Al fit into the special needs educational ecosystem?

Maud has put together a **reference booklet** relating to the topics of her presentation and symposium workshop. To access this reference booklet, please follow the link: https://app.box.com/s/afxgougbhzjyg3gklm3fxnuvrjq6ulcm





Dr Andrew Struan (he/him)



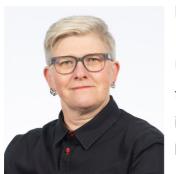
Andrew Struan is Head of Student Learning Development at the University of Glasgow. He has worked across the globe in academic literacies and in political history. His role at Glasgow is in developing students' academic abilities, including digital literacies, and he leads an award-winning, multi-disciplinary team. His PhD is in political history: he researches the linguistic history of parliamentary debate and

the role of language in shaping ideologies.

Presentation Title: Al and the 'other' Al: academic integrity

Presentation Abstract: Our paper will look at the guiding principles of use of AI for students at the University of Glasgow and a case study of their implementation. We will discuss the university-wide guidance and resources provided to our students, and discuss a specific example from first-year psychology in the use of a scaffolded-in approach to AI in assessments. Our paper highlights the need to provide students with clear guidance and information on the use of AI, alongside meaningful activities that allow students to engage with, test and critique AI outputs.

Dr Simone Stumpf (she/her)



Dr Simone Stumpf is a Reader in Responsible and Interactive AI at the School of Computing Science at University of Glasgow. She has a long-standing research focus on user interactions with AI systems. Her research includes self-management systems for people living with long-term conditions, developing teachable object recognisers for people who are blind or have low vision, and

investigating AI fairness. Her work has contributed to shaping the field of Explainable AI (XAI) through the Explanatory Debugging approach for interactive machine learning, providing design principles for enabling better human-computer interaction and investigating the effects of greater transparency. The prime aim of her work is to empower all users to use AI systems effectively.





Presentation Title: Supporting stakeholders to assess AI: Using the PHAWM approach to develop Responsible AI

Presentation Abstract: Assessing AI to make sure it is ethical and responsible has, until now, been left solely in the hands of AI experts. There is no agreement of what counts as 'good enough' to be acceptable to stakeholders, including ones who ultimately use the AI or are affected by its outputs. PHAWM, one of three RAI UK-funded keystone projects, is driving change in AI testing and evaluation through the novel concept of participatory AI auditing, where a diverse set of stakeholders without a background in AI, such as domain experts, regulators, decision subjects and end-users, are empowered to undertake audits of predictive and generative AI, either individually or collectively.

Outputs will include **workbenches** that support stakeholders in auditing AI, with audits embedded in **methodologies** that define how, when and who carries out the audit. The focus will then move to **training stakeholders** to carry out the audits, to embed project outputs in practice. The team will work towards a **certification framework for AI solutions**, democratising AI development and ensuring that AI is safe and trustworthy.

This talk will describe the PHAWM project plans and present work in progress.

Dr Tiffany Vlaar (she/her)



Tiffany Vlaar is a lecturer at the University of Glasgow with research interests in mathematics of deep learning and climate change Al. Prior to this, she was a postdoctoral researcher at Mila - Quebec Al Institute and McGill University and a PhD student at the University of Edinburgh. As co-founder of the

Piscopia Initiative she is passionate about increasing diversity in postgraduate research programmes in STEM.

Presentation Title: Coding, creativity and confidence in the Generative Artificial Intelligence era

Presentation Abstract: Generative Artificial Intelligence (AI) — with large language model (LLM) ChatGPT as a well-known example — is gradually becoming integrated





into everyday life. A relatively underexplored research area is how its usage may pose new challenges to students' learning process for solving coding problems. We propose an intervention to empower the use of AI without loss of problem-solving expertise, avoid the blind use of these tools, and promote the joy of learning. The outcome of this intervention will explore current students' understanding of AI and serve as a basis for developing new pedagogies with relevance for both higher education and beyond.

Professor Leanne Williams (she/her)



Before working in HE Leanne gained extensive experience in technical, and research-supporting roles working on the *C.elegans* and Human genome project at the Sanger Institute. This was followed by a senior research assistant position in a Type 2 diabetes, electrophysiology research group at The University of Cambridge Biochemistry Department. To pursue a passion for working with people and

second chance education Leanne gained a PGCE at the University of Nottingham and taught in an inner-city Further Education college for many years, specialising in teaching adult returners including asylum seekers. Leanne then left further education to return to education and gained a PhD in aquaporin expression in mammalian ovarian follicle development, at the University of Nottingham School of Veterinary Science and Medicine.

After a short post-doc; in 2012 she started as a Teaching Fellow at the University of Warwick, School of Life Sciences. Within two years Leanne's teaching philosophy born from her experiences in FE with a focus on identifying and minimising transitional barriers, provided a framework for institutional recognition winning the Warwick Award for teaching excellence. Leanne also re-established the focus of lab practicals to prioritise technical skills acquisition and independent problem solving rather than linear 'recipe-led science'. As Senior Tutor and Director of student wellbeing, Leanne affected cultural change by placing student wellbeing and representation at the front and centre of curriculum development, provision and support. The impact was again recognised with the Warwick Award for Personal Tutor Excellence.





LearnSci. After several years working with LearnSci on their advisory panel, Leanne took the exciting step to work more closely with the team in recognition of their progressive and innovative support of technical and analytical skills, and the vast potential for edtech in this exciting new era of Al to add value and equity of opportunity for both learners and practitioners.

Presentation Title: Student experience and understanding of AI across academia in the UK

Presentation Abstract: Artificial Intelligence (AI) holds immense potential for transforming education, particularly for disabled students, neurodiverse students and students with specific learning difficulties. This talk will explore the current and future applications of AI in education, highlighting both the benefits and challenges for these students. It will showcase examples of how AI-powered tools like assistive technologies, adaptive learning platforms, and telepresence robots can create a more inclusive and accessible learning environment. However, it will also emphasise the importance of a balanced approach, moving beyond the hype of generative AI to consider the full spectrum of AI technologies and their impact. By understanding the diverse landscape of AI and prioritising accessibility and individual needs, we can leverage its power to empower all learners and create a more equitable educational experience.

Dr Mark Wong (he/him/his)



Dr Mark Wong is a Senior Lecturer in Public Policy and Research Methods and Deputy Head of Urban Studies at the University of Glasgow. His expertise is in racial bias of Al and using participatory, co-design methods to centre the voice of minoritised ethnic people in Al innovations. He has served in several expert advisory roles for the Scottish Government, Public Health Scotland, and NHS. He is also

a Principal Investigator/ Co-Investigator of several UKRI-funded research projects, including co-investigator of the £3.5 million "Participatory Harm Auditing and Workbenches Methodology" (PHAWM) project led by the University of Glasgow. He was a Minister-appointed member of the Scottish Government's Anti-Racism Interim



Governance Group and he's the Co-Chair of the Design Advisory Group for the Antiracism Observatory of Scotland.

Webpage: https://www.gla.ac.uk/schools/socialpolitical/staff/markwong/

Twitter: @UoG MarkWong LinkedIn: Mark-Wong-uofg

Presentation Title: Building trustworthy and responsible AI through co-design with adversely racialised people

Presentation Abstract: How we access everyday services is increasingly dominated by systems powered by Al. However, public mistrust towards Al, especially how it perpetuates racial bias, prejudice, and discrimination, is growing. This talk addresses this challenge and offers guidance on how to safeguard against these harms. It will suggest a framework on how to develop Al in responsible and trustworthy ways. The speaker will present a methodology of co-designing Al with adversely racialised people, in order to identify and prevent prejudice and discrimination being baked into Al systems. The talk also highlights the importance, and ways, of centering the voice and needs of adversely racialised people in Al innovation. This framework is developed for participatory research, led by researchers at the University of Glasgow, with adversely-racialised people in England and Scotland, policymakers, third sector, national regulators, community organisations, and the wider Al ecosystem.

The framework responds to calls from global experts in responsible AI for urgent actions and policies to centre the voice of people who are negatively impacted. It is, therefore, urgent to understand how to co-design AI with people who are adversely racialised to ensure AI is fair and trustworthy, especially for those who are marginalised in society and experience of racism and racialisation is an everyday reality. Amplifying the voice and expertise of adversely racialised people is key to prevent AI innovation reproducing such inequities and unjust hierarchical ordering of people in the digital era. This talk provides new knowledge and evidence of a human-centred approach on how to address this in practice.





Steph Wright (she/her)



Steph has a diverse background ranging from astrophysics to genomics in academia and film & TV to dance in the arts and the third sector. A project and programme management professional, she loves to develop and build collaborations across organisations to help people with their data/Al journey. Steph led on the Data Lab's efforts in support of the Scottish Government in developing Scotland's Al Strategy and she's

now leading the delivery of the strategy's vision for Scotland to be a leader in the development and use of trustworthy, ethical and inclusive AI. She is also a Co-Founder of Diverse AI and was recognised as one of the 100 Brilliant Women in AI Ethics in 2023 and one of the Top 10 Women in Tech in Scotland in 2023.

Presentation Title: Delivering on Scotland's vision for trustworthy, ethical and inclusive Al... and why does it matter?

Presentation Abstract: Scotland launched its national strategy in March 2021 and set out a vision for Scotland to become a leader in trustworthy, ethical and inclusive AI. Find out how the strategy delivery is going and why the focus on trustworthy, ethical and inclusive AI matters.



Meet the Panel (Day 1 Panel Discussion)

Heriberto (Heri) Busquier Cerdán (he/him)



Heriberto (Heri) Busquier Cerdán is the Students'
Representative Council Vice-President (Education) for
2024/25. With a background in astrophysics and extensive
experience in student representation, Heri brings fresh
perspectives and enthusiasm to his role. He is committed to
contributing to the development of good practices for Al in
Higher Education, ensuring that technological
advancements benefit both students and educators.

Heri's passion for student partnership and co-creation drives his work. He has been actively involved in various initiatives aimed at enhancing the student experience and creating an inclusive learning experience for students. His dedication to student advocacy is evident in his efforts to engage in meaningful discussions around the fast-evolving topic of AI, aiming to create a more inclusive and forward-thinking educational landscape.

Heri looks forward to continuing his work on student partnership and the ethical integration of AI in education, striving to ensure that all students have the opportunity to thrive in an ever-changing academic environment.

Professor Martin Hendry (he/him)



Martin Hendry is Vice-Principal and Clerk of Senate, at the University of Glasgow, and is responsible for the governance of academic policy and practice, as well as for academic standards, across the University.

Martin is also Professor of Gravitational Astrophysics and Cosmology in the School of Physics and Astronomy, where he was Head of School from 2012 to 2020.

Martin is a Fellow of the Institute of Physics and the Royal

Society of Edinburgh, and is currently Vice President of the RSE and chair of the RSE's Learned Societies Group on Scottish STEM Education.





Ava Scott-Nadal (she/her) – Student Intern Al Ethics



My name is Ava Scott-Nadal and I'm a fourth year Film and Television with Philosophy student. I've been enthralled by contemporary ethics during my degree and have recently finished a summer course in Bioethics at Yale university. Prior to this I was a project assistant for a charity that focuses on promoting AI global governance, in light of its rapid and often unpredictable development. I'm excited to

bring these practical skills to the role. I've been drawn to AI ethics because of how it interacts with healthcare, emerging technologies, and media. I believe AI really does have the ability to change the world. However, it should be approached with strong considerations of equality, fair representation, and inclusion. I look forward to promoting these concepts during my role!

Professor Chris Pearce



Professor Chris Pearce is responsible for the University's research & knowledge exchange strategy and policy development, collaborating with our four academic colleges. He is supported in this role by key professional services including Research & Innovation Services, Library, Planning, Insights & Analytics, and HR.

Chris is also a Professor of Computational Mechanics at the

James Watt School of Engineering and previously held the Royal Academy of Engineering / EDF Research Chair in Computational Mechanics. His research has focussed on modelling complex material behaviour and multi-physics problems, and he has applied these techniques to various fields, including Civil, Nuclear, Manufacturing, and Biomedical Engineering. He has addressed critical, life-limiting structural integrity issues, most recently applied to the UK civil nuclear industry. He is a Fellow of the Institution of Civil Engineers a Chartered Engineer and Fellow of the Learned Society of Wales. He is co-Director of the Glasgow Computational Engineering Centre, on the Board of the Scotland 5G Centre, the Board of the Glasgow Centre for Population Health and the Board of the Scottish Research Partnership for Engineering.





Chris was appointed as Vice-Principal in 2020, having previously held the role of Dean of Research and Deputy Head of the College of Science & Engineering.

Professor Moira Fischbacher-Smith (she/her)



Moira Fischbacher-Smith is Professor of Public Management and Vice-Principal (Learning & Teaching) at the University of Glasgow. She leads the University's strategy and policy development for learning and teaching, has responsibility for teaching quality, and works with colleagues across the University to support student and staff development in relation to teaching and learning.

Moira was on the Project Board that developed the James McCune Smith Learning Hub on the University's main campus and leads the work on refurbishing teaching spaces on campus. Moira is actively engaged in teaching-related external networks such as the Universitas 21 Educational Innovation Cluster and is co-lead for the Scottish Funding Council's Tertiary Quality Steering Group. Moira is also Vice Chair of the Management Board of the Glasgow Centre for Population Health.



Please scan the QR code on the left or <u>click here</u> to submit your questions or thoughts to the panel. The **panel discussion** (Day 1, 2nd Oct) will focus on AI use in Higher Education teaching and research.



Feedback & Thanks



Before you go, please scan the QR code on the left or <u>click here</u> to leave feedback on your experience of the symposium. **We really value your opinions!**

Thank you for joining our community and for your contribution to the Lovelace-Hodgkin Symposium on AI ethics! We hope you enjoyed the event, and we wish you safe home.

Best wishes,

The Lovelace-Hodgkin Symposium Team

