KING'S INSTITUTE
FOR ARTIFICIAL
INTELLIGENCE

King's College LONDON

Annual Report 2024

Contents

The King's Institute for Artificial Intelligence is working to bring together and coordinate our artificial intelligence research and education across the university, to provide more opportunities for multidisciplinary teams to rise to the challenges of AI, and to give a greater coherence to the overall agenda at King's in a supportive AI community. To tell us about your work, or find out more about ours, email **ai-institute@kcl.ac.uk**.

Message from the Director

In less than two years, generative AI (GenAI) has undergone an evolution comparable to that of personal computers. If 2022 was the year in which ChatGPT introduced GenAI to public consciousness, 2023 was the year it began to capture the business world's attention.

The first seven months of 2024 have been pivotal for the future of artificial intelligence (AI), with academics and business leaders striving to integrate this technology into research, products, and operations.

The field of AI has experienced unprecedented growth and attention, both globally and within the UK. The landscape has been marked by rapid advancements and widespread adoption of GenAI. GenAI has increasingly been normalised and has cemented its separation from ChatGPT, as discussions now focus more on actual applications rather than chatbots. Society now has a more refined understanding of AI-powered solutions, even though some still harbour unrealistic expectations due to the hype, viewing AI as a panacea.

The role of AI in automating tasks and creating new jobs presents a paradox that requires a strategic approach from business leaders to balance automation with employment opportunities. The rise of the 'One-Person Enterprise' powered by AI agents represents an important societal development that still needs to be fully understood.

Innovation in AI has been led by both established companies and startups, the latter fuelled by strong venture funding, which increased again in the first quarter of 2024 despite some fluctuations at the end of 2023.

An important aspect that has come to the fore in the last year is the focus on sustainability, with a resurgence in discussions about both AI's potential role in addressing climate-related issues and its carbon cost, related to, among other factors, training large models and cooling data centres.

These developments highlight AI's growing significance across industries and its potential for innovation, but also the ongoing need to address ethical and regulatory challenges as the technology continues to evolve rapidly. The past year has seen a growing focus on ethics, risk, and regulation of AI, including the US government's executive order on 'safe, secure, and trustworthy artificial intelligence'

and the UK government's commitment to leading in AI innovation and responsible development. The AI Safety Summit at Bletchley Park positioned our nation at the forefront of global discussions on AI safety. The government's launch of the AI Safety Institute complements the UKRI investments of £100m in AI hubs and a further £117 million in 12 new centres to continue training doctoral researchers in AI. The flagship Responsible Ai UK (RAi UK) programme has started to fund projects to realise its vision. Finally, with the proposed AI Regulation Bill, the UK has underscored its dedication to fostering innovation while ensuring responsible AI development.

King's enthusiastically embraces the AI future but wants to actively shape and guide it by bringing together leading minds from academia, industry, businesses, and regulatory bodies. In an environment where industry has raced ahead of academia in terms of resources and, consequently, development of significant AI models, we have reviewed the current academic landscape of AI and explored areas where King's is a world leader and fosters emerging areas of academic excellence. The review highlighted a clear, ambitious path forward that will help our institution deliver its mission.

From a sound basis of significant and high-profile AI activity detailed in our previous annual reports, developments across the King's landscape over the past year include both groundbreaking research outcomes and promising new initiatives. Notable findings emerged from Dr Heba Sailem's work on an AI-powered tool for cancer diagnosis, particularly in identifying mesothelioma subtypes. Dr Mark Ainslie collaborated on developing the world's strongest iron-based superconducting magnet using AI, in what could be a breakthrough for affordable MRI machines and the future of electrified transport.

In terms of new grants and projects, King's secured significant funding for future AI research: a £1.55 million NIHR grant for an AI co-pilot in dental care, £650,000 from MRC for AI in lung cancer research led by Dr Tim Witney, and Dr Yansha Deng's involvement in a €6 million Horizon Europe project. The university is also set to play key roles in two EPSRC-funded AI research hubs: the Causality in Healthcare AI with Real Data (CHAI) Hub, led by Dr Hana Chockler at King's, and the AI Hub for Productive Research and Innovation in Electronics (APRIL), where Professor Bipin Rajendran co-leads the 'Device Design' theme. Looking ahead, the PharosAI project, awarded £100,000 in seed funding, aims to develop an AI platform for cancer research. Academics from across King's are shaping work in the aforementioned Responsible Ai UK (RAi UK) programme: Dr Kate Devlin leads the Creative and Outreach strand, while Dr Caitlin Bentley runs the Skills Programme, and Professor Sana Khareghani leads on Policy and Public Engagement. Professor Prokar Dasgupta sits on the RAi UK Leadership team. King's is also

King's enthusiastically embraces the AI future but wants to actively shape and guide it by bringing together leading minds from academia, industry, businesses and regulatory bodies.

participating in RAi UK's £3.5 million Participatory Harm Auditing Workbenches and Methodologies (PHAWM) keystone project, with involvement from Professor Elena Simperl, Professor Elizabeth Black, Professor Daniele Quercia, and Professor Dan Hunter, exploring responsible AI implementation. King's is also part of a new BBSRC-funded network to support and enhance engagement between the Bioscience and AI communities in the UK, with Dr Robert Knight leading at King's. These initiatives, spanning from healthcare to engineering and ethical AI development, underscore King's ongoing commitment to advancing AI research and its applications across diverse fields.

Alongside the research achievements of the past year, our innovative work in AI-enhanced teaching, assessment, and feedback, led by Dr Martin Compton, Professor Oguz A. Acar, Dr Christine O'Dea, and others, is pushing boundaries in education. For example, 7,714 participants across 149 countries have completed 'Generative AI in Higher Education', the freely available FutureLearn MOOC, since autumn 2023, giving it an average rating of 4.9 out of 5. The course is designed to help HE professionals better understand the impact of AI on the sector.

King's continues its commitment to working with The Alan Turing Institute and other universities in the Turing University Network to facilitate better connections across the data science and AI landscape and provide a springboard for collaborations.

The King's Institute for Artificial Intelligence has been delivering against its strategic priorities by fostering a connected and coordinated research community that transcends disciplinary boundaries; engaging with external partners and establishing new collaborations; providing AI education and training; and cementing our internal and external visibility. The King's Festival of Artificial Intelligence at the end of May 2024 was a resounding success, drawing over 1,500 attendees across five days and not only showcasing our research to the wider community but also emerging as a convenor for people to learn, think, and contribute to the conversation about society's next chapter in the AI story. On the last day of the festival, we welcomed the next generation of AI-native thinkers to the Family Zone, who radiated a special positive energy! While the festival represents the highlight event, we've hosted and supported numerous events throughout the year, ranging from AI and space to AI and environmental activism, that uncovered new internal and external partnerships.

We have run interdisciplinary workshops and grant challenges to drive innovation and collaboration across various fields. Establishing a common language and arriving at multidisciplinary research challenges has been rewarding and showed the potential of breaking the barriers between disciplines.

We have launched the Affiliate Scheme, bringing in diverse expertise and perspectives and a new drive in the life of AI at King's.

The King's Institute for Artificial Intelligence has been delivering against its strategic priorities by fostering a connected and coordinated research community that transcends disciplinary boundaries.

We have welcomed more than 100 affiliates, who have participated in our events, represented King's externally as experts sought by a variety of organisations, and benefited from the connections made through the Institute with new publications and grant proposals. We've seen significant growth in our online presence, with a 27 per cent increase in followers just between April and June and an average of 2,040 page views a month for 2024, compared to 880 in 2023. I have anecdotal evidence that colleagues across the nation see our activities as a blueprint for a multidisciplinary institute.

However, as we enter our third full year of operation, we must redouble our efforts to showcase and strengthen King's unique multi-dimensional approach to AI. Overcoming fragmentation across disciplines and the ensuing entrenched incentives requires a drive that is now present in many parts of the institution. Building on the successes of 2023–24, we look forward to further leveraging the power of the AI at King's community and launching new activity streams in the service of our strategic priorities. As we look ahead, let's maintain our commitment to advancing AI research, education, and applications in ways that are ethical, innovative, and impactful!

As my tenure as director continues through to spring 2025, I'm filled with pride at what we've accomplished together and excited about the foundation we've built. It's been an absolute pleasure leading the incredible team of the King's Institute for Artificial Intelligence, and I'm genuinely excited to see what new heights the college will reach in the future. King's is uniquely positioned to address the multifaceted challenges and opportunities in AI, from technological advancements to ethical considerations and societal implications. The potential here is limitless, and I have no doubt that with talent and dedication, King's will continue to play a major role in shaping the future of AI, both nationally and internationally.

Professor Carmine Ventre
Director
King's Institute for Artificial Intelligence

Building on the success of 2023–24, we look forward to further leveraging the power of the AI at King's community and launching new activity streams in the services of our strategic priorities.

About us

AI work lies in every faculty across King's, with activity spanning core AI (its technical underpinnings), applications and societal implications. The Institute aims to network these researchers and educators, to bring them together with those from industry, policy makers, and the wider public in fostering collaboration, to advance research and to develop the understanding and application of AI in society.
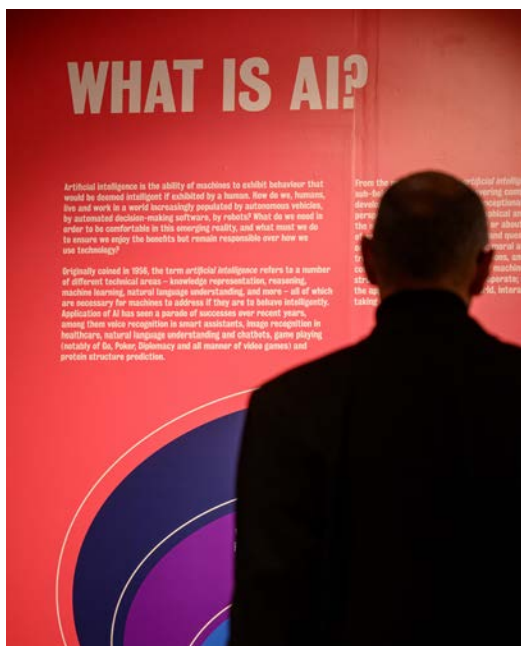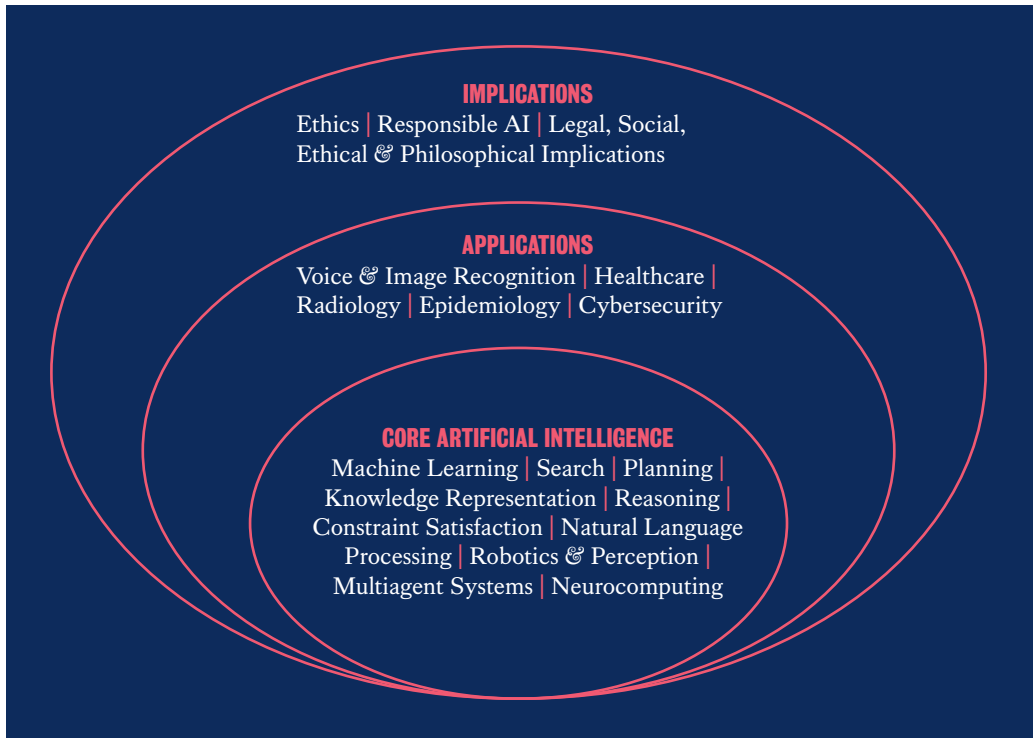
To do this successfully, the Institute must be embedded within and reflect the interests of the AI at King's community. Two representatives from each of the university's faculties sit on the Institute's Steering Group.

In September 2023, the Institute launched an Affiliate Scheme for academics, researchers, and postgraduate research students across the university. There are 105 affiliates as of July 2024, and the network is growing.

ACADEMIC DIRECTOR

PROFESSIONAL SERVICES STAFF

STEERING GROUP

ARTS & HUMANITIES REPRESENTATIVES	SOCIAL SCIENCE & PUBLIC POLICY REPRESENTATIVES	DENTISTRY, ORAL & CRANIOFACIAL SCIENCES REPRESENTATIVES
NATURAL, MATHEMATICAL & ENGINEERING SCIENCES REPRESENTATIVES	LIFE SCIENCES & MEDICINE REPRESENTATIVES	THE DICKSON POON SCHOOL OF LAW REPRESENTATIVES
NURSING, MIDWIFERY & PALLIATIVE CARE	PSYCHIATRY, PSYCHOLOGY & NEUROSCIENCE REPRESENTATIVES	KING'S BUSINESS SCHOOL REPRESENTATIVES

AFFILIATES

8	8	5	38	16	3	2	15	10

Figure 1. The King's Institute for Artificial Intelligence is embedded within the faculty communities whose interests it seeks to reflect.

IMPLICATIONS
Ethics | Responsible AI | Legal, Social,
Ethical & Philosophical Implications

APPLICATIONS
Voice & Image Recognition | Healthcare |
Radiology | Epidemiology | Cybersecurity

CORE ARTIFICIAL INTELLIGENCE
Machine Learning | Search | Planning |
Knowledge Representation | Reasoning |
Constraint Satisfaction | Natural Language
Processing | Robotics & Perception |
Multiagent Systems | Neurocomputing

WORKING IN AI AT KING'S?

● Apply to join our **Affliate Scheme in 2024–25.**

● Join our **internal mailing list.**

● For more details about our Affliate Scheme **see page 10.**

● For the 2023–24 Steering Group members **see the inner back page**

Figure 2 (above). An illustration of some areas of expertise at King's across foundational AI, applications of AI and implications of AI.

Our priority goals

If King's is to make the world a better place through its work in AI, it should strive to be the best place to research, learn and engage with AI. Our experts should be visible and their work accessible to external organisations and communities. They should be connected to each other, networked to application areas and industry, and know that their successes and strengths inform clear and coordinated strategies for research and education in AI at King's. This is the vision of the King's Institute for Artificial Intelligence. Its purpose is to make this happen. The Institute's mission is threefold:

- To contribute to the development of a university agenda that reflects faculty interests and adds value to faculty communities
- To provide researchers and educators an environment and additional opportunities to build multidisciplinary teams to rise to the challenges presented by AI now and in the future
- To create a pipeline of opportunities to establish links to application areas and industry, and to engage with policy makers, other external organisations and the general public

We will achieve this by focusing our efforts and resources in the following four priority goals:

- Enable a Connected and Coordinated Research Community (pp 9–22)
- Provide New Opportunities for Engagement and External Collaborations (pp 23–40)
- Raise King's AI Profile by Increasing Internal and External Visibility (pp 41–46)
- Support Education and Develop Training (pp 47–48)

This annual report expands on each of these priority goals and presents the significant activity undertaken to achieve them.

If King's is to make the world a better place through its work in AI, it should strive to be the best place to research, learn and engage with AI.

A connected and coordinated research community

The Institute will create networks, channels and events to bring together AI communities at King's with a particular focus on establishing and nurturing new research connections and generating new internal collaborations and opportunities for interdisciplinary working. The aim is to provide a platform to study AI holistically and bring together the experts in core AI with the experts in applications areas and the legal, societal, ethical and philosophical implications of technological developments in AI.

King's Institute for Artificial Intelligence Affiliate Scheme

The Institute launched an Affiliate Scheme at the start of the 2023– 24 academic year. The Institute Affiliate role offers academic and research staff and postgraduate research students at King's an opportunity to align their research and interests with the mission of the Institute. Affiliates play a crucial role in shaping the Institute's agenda. They also receive priority access to Institute opportunities as well as invitations to bespoke, affiliate-only events.

The Affiliate Scheme brings together the AI at King's community to establish and nurture research connections and generate new internal collaborations and opportunities for interdisciplinary working.

As of July 2024, there are 105 affiliates from across King's in the Institute's Affiliate Scheme. Affiliates represent eight faculties (out of nine at King's) as well as colleagues from other central departments and services at King's.

The affiliates represent all career levels. Almost one fifth of affiliates are PhD students, highlighting the Institute's commitment to support early career researchers at King's.
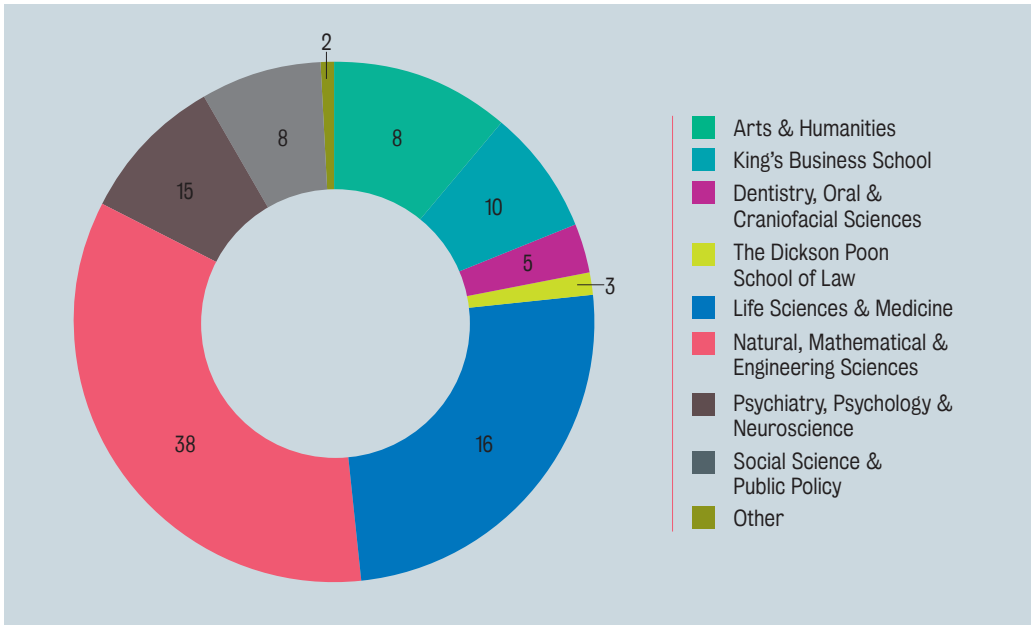
'The Affiliate Scheme has been transformative for my early career path, as it strengthens the relation of various disciplines to understand the impact of AI, enabling innovation individually and as a community going beyond traditional boundaries.'
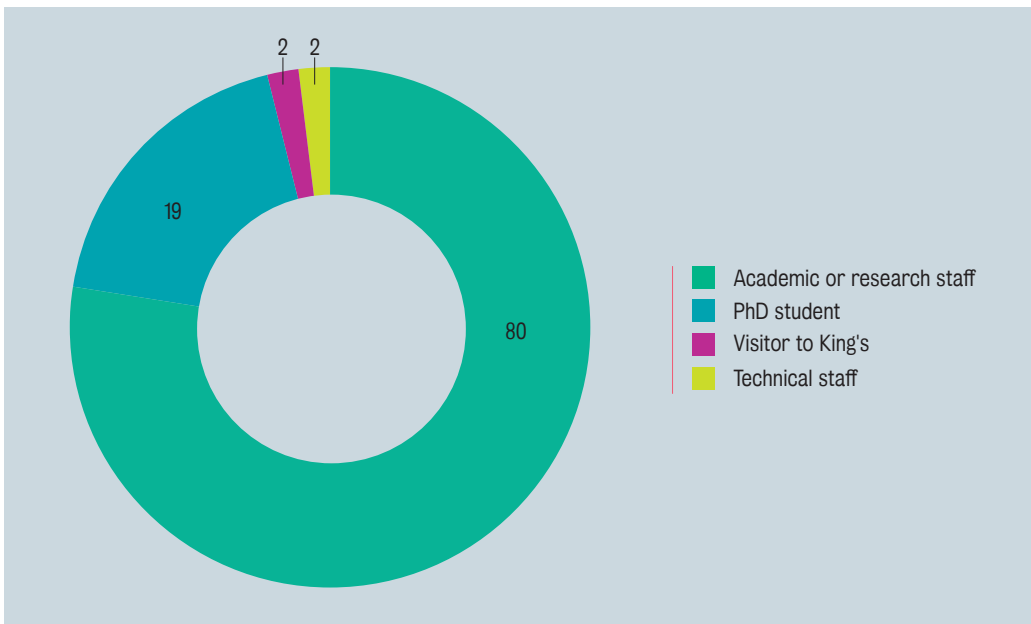*Daniela Horta, PhD student, Faculty of Social Science & Public Policy*

At a glance

Figure 3. Breakdown by faculty of 105 affiliates, July 2024

Figure 4. Breakdown by career type of 105 affiliates, July 2024

Networking and collaboration

88 per cent of affiliates have attended or contributed to one or more Institute events in 2023–24 showing that the affiliate community is active and engaged in the Institute's agenda.

Two exclusive networking events have been held, giving affiliates an opportunity to network with fellow affiliates, discuss collaboration opportunities and understand how they can shape the Institute's programme of activities.

71 opportunities were shared with affiliates between October 2023 and July 2024. **Find out more on page 26.**

The Institute conducted a reporting process with affiliates in July 2024. 57 of 105 affiliates shared information about their activities during their term as an affiliate, including their publications and grant activities.

Our affiliates tell us that being part of a connected, interdisciplinary research community is beneficial to their research activities at King's.

The first affiliate applications were considered in September 2023 so our current cohort of affiliates are between one to ten months only into their term.

75 per cent of affiliates who responded to the survey told us about 105 publications, including journal articles, conference papers, reports, and books.

Email **ai-institute@kcl.ac.uk** for the full list of Affiliate publications.

'**Our Affiliate Scheme is a central activity towards our priority goal of creating and fostering a connected and coordinated research community. By bringing together diverse perspectives and expertise from across the university, encompassing researchers from various disciplines, backgrounds, and career stages, we're creating a powerful and inclusive ecosystem that will propel King's to the forefront of AI research.**'
Professor Carmine Ventre, Institute Director

28 **per cent** of affiliates who responded to the survey reported winning grants, awards, funds or fellowships for their research during their time as an affiliate.

AFFILIATE CASE STUDY 1

Dr Mercedes Bunz
Faculty of Arts & Humanities, King's College London

GRANT ACTIVITY

- UKRI/BRAID fellowship (12 months) 'AI art beyond the gallery: exploring the capacity of cultural institutions to impact tech policy' with Serpentine Galleries as a collaborative partner

- AHRC/BRAID collaborative scoping grant (six months): 'AI in the street: scoping everyday observatories for public engagement with connected and automated urban environments'

PUBLICATIONS

- Bunz, Mercedes (forthcoming 2024) 'Thinking Through Generative Writing', in: Thinking With AI, edited by Hannes Bajohr, Open Humanities Press, London. **https://osf.io/preprints/mediarxiv/4th3x**

'**The Institute's Affiliate Scheme has helped inform my grant writing and work this year.**'
Dr Mercedes Bunz, Faculty of Arts & Humanities

AFFILIATE CASE STUDY 2

Dr Thomas Day
Faculty of Life Sciences & Medicine, King's College London

GRANT ACTIVITY

- NIHR Invention for Innovation (i4i) Product Development Award, submitted December 2023 – pending
- NIHR Invention for Innovation (i4i) Product Development Award, submitted June 2024 – pending

PUBLICATIONS

- Day TG, Budd S, Tan J, Matthew J, Skelton E, Jowett V, Lloyd D, Gomez A, Hajnal J, Razavi R, Kainz B, and Simpson J. (2023) 'Prenatal diagnosis of hypoplastic left heart syndrome on ultrasound using artificial intelligence: How does performance compare to a current screening programme?' Prenatal Diagnosis. DOI: 10.1002/pd.6445
- Day TG, Matthew J, Budd S, Hajnal J, Simpson JM, Razavi R, Kainz B. (2023) 'Sonographer interaction with artificial intelligence: collaboration or conflict?' Ultrasound in Obstetrics and Gynaecology. 62:167-174
- Day et al (2024) 'Interaction between clinicians and artificial intelligence to detect fetal atrioventricular septal defects on ultrasound: how can we optimize collaborative performance?' Ultrasound in Obstetrics and Gynaecology

The Affiliate Scheme has provided a platform for collaborative opportunities across various disciplines. Affiliates have engaged in joint research projects, co-supervision of students, and cross-departmental initiatives. The scheme has facilitated public lectures, academic exchanges, and participation in conferences, contributing to knowledge sharing and networking. Affiliates report collaborative efforts in areas such as AI in education, healthcare, law, migration studies, and data management. Some of these partnerships have led to grant proposals and publications.

'Being an Institute Affiliate has supported my research by providing the opportunity to publicly present it at the AI Festival and by keeping me informed of various funding opportunities, one of which recently led to success.'

Dr Héctor Menéndez, Lecturer in Computer Science, Faculty of Natural, Mathematical & Engineering Sciences

'My research has benefitted from my affiliation with the Institute.'

65 % agree or strongly agree

'Being an affiliate of the Institute brings good opportunities for networking with colleagues.'

79 % agree or strongly agree

AFFILIATE COLLABORATION

One of our affiliates in King's Business School used the Affiliate Scheme to recruit an affiliate from the Institute of Psychiatry, Psychology & Neuroscience to a multidisciplinary project team working to deliver a 12-month funded project on Generative AI and assessments.

The Institute's events have sparked new research directions and informed grant writing processes for some affiliates. Additionally, affiliates have contributed to broader discussions on AI through media engagements and participation in reading groups, showcasing the diverse activities of those involved in the scheme.

The Institute encourages affiliates to reflect on what might add most value to The AI at King's community, and then works to build these recommendations into the Institute's initiatives.

King's Institute for Artificial Intelligence Affiliate networking breakfast, July 2024

● **Apply to join the Affiliate Scheme.**

● View our **Affiliates' profiles.**

Interdisciplinary workshops

The Institute launched a series of interdisciplinary workshops at King's to stimulate new research activity across disciplines and to surface emerging focal areas. The workshop themes were: AI and Sustainability, AI and Health, AI and Regulation, AI and Business.
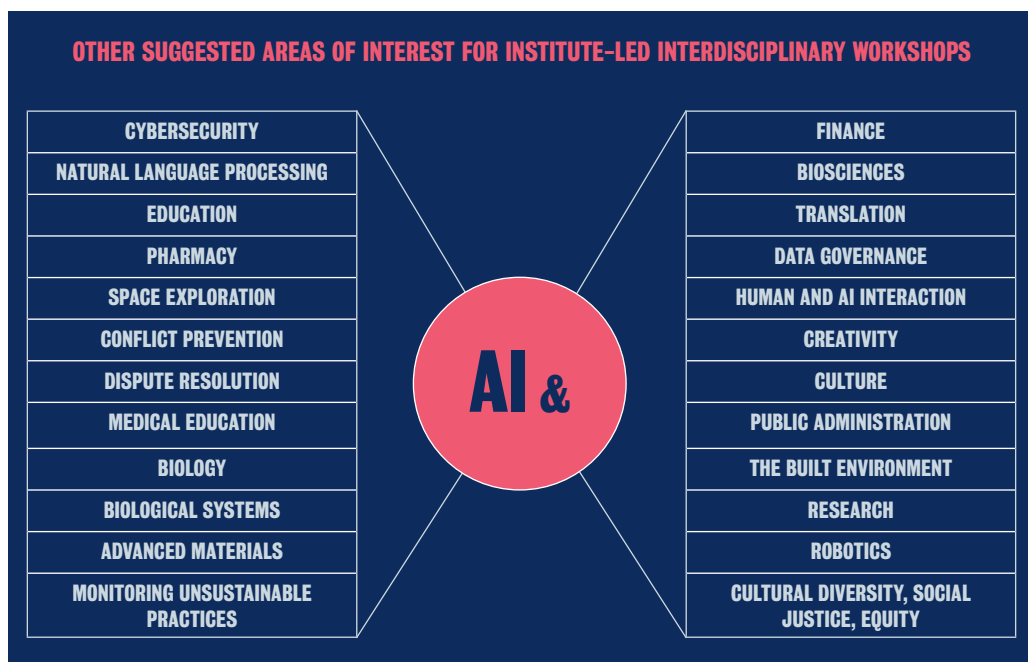
A call for participation to the workshops was shared across King's. 120 individuals completed the expression of interest form, with responses from all nine faculties as well as central services.
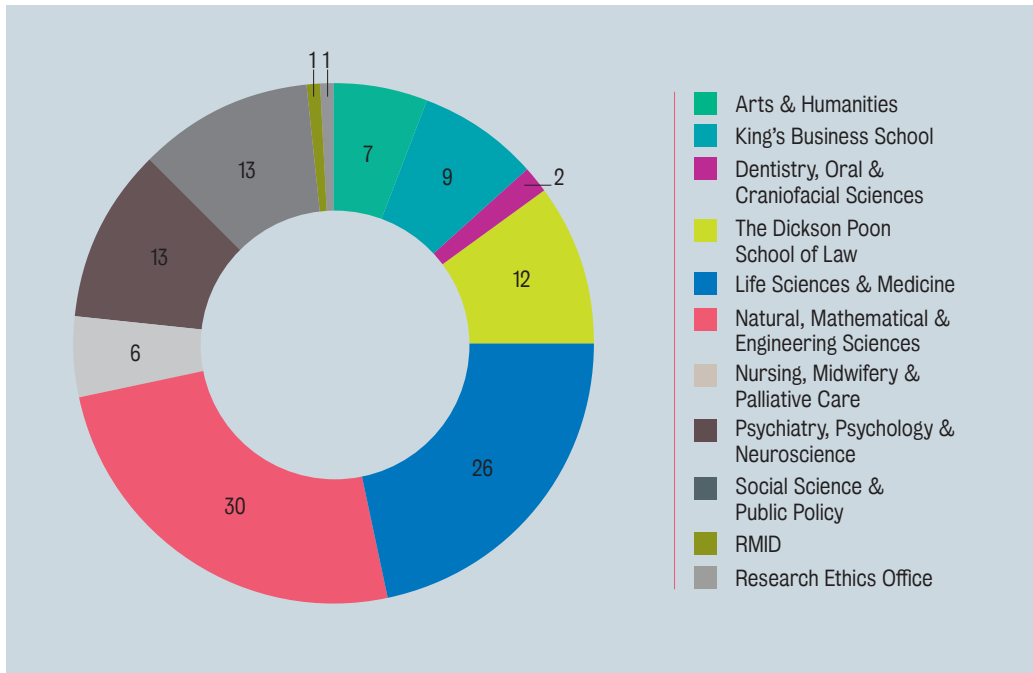
55 attendees each presented 90-second lightning presentations across two workshops, allowing colleagues from multiple disciplinary perspectives to identify areas of common or complementary interest.

Participants were asked to suggest themes of interest for future Institute-led interdisciplinary workshops.
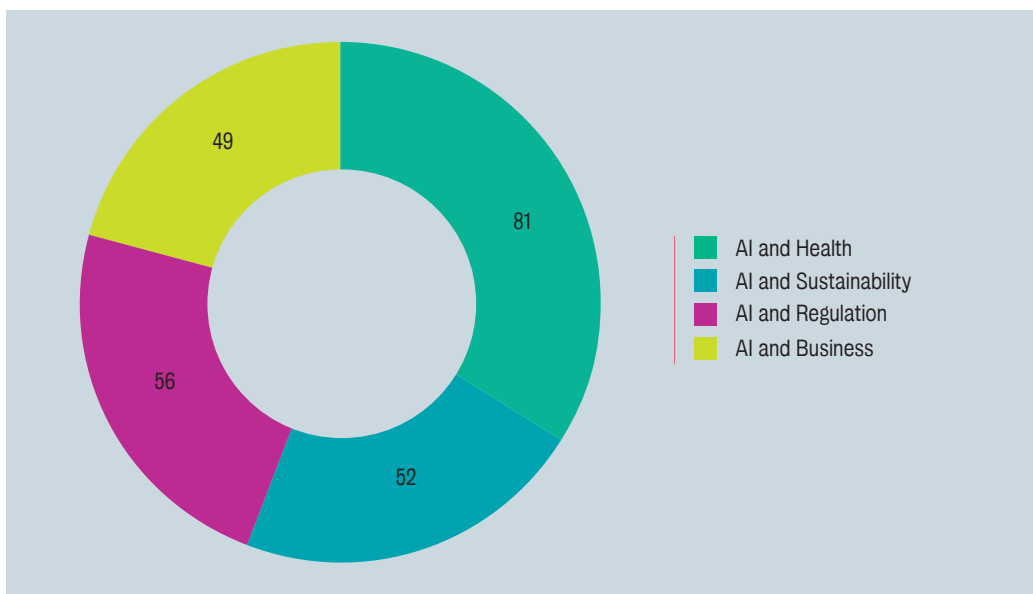
A dedicated networking session after the presentations encouraged people to build on connections they made and coalesce around research challenges. This was not limited to just academics – Technical Staff and Professional Services Staff attended the interdisciplinary workshops, sharing the support they can provide to the AI community at King's, for example with computing facilities or support interpreting government guidance.

'I made connections with new colleagues across disciplines and formed a collaboration with Professor Oguz Acar from King's Business School and Dr Albert Meroño Peñuela from the Faculty of Natural, Mathematical & Engineering Sciences. We're now applying for grants on workplace conflict dynamics and AI-facilitated behaviour change. This interdisciplinary opportunity has significantly advanced my research and opened new collaborative avenues. I'm grateful to the Institute for facilitating these connections and discussions.' *Dr Gülüm Özer, Institute of Psychiatry, Psychology & Neuroscience*

OTHER SUGGESTED AREAS OF INTEREST FOR INSTITUTE-LED INTERDISCIPLINARY WORKSHOPS

AI &

CYBERSECURITY
NATURAL LANGUAGE PROCESSING
EDUCATION
PHARMACY
SPACE EXPLORATION
CONFLICT PREVENTION
DISPUTE RESOLUTION
MEDICAL EDUCATION
BIOLOGY
BIOLOGICAL SYSTEMS
ADVANCED MATERIALS
MONITORING UNSUSTAINABLE PRACTICES

FINANCE
BIOSCIENCES
TRANSLATION
DATA GOVERNANCE
HUMAN AND AI INTERACTION
CREATIVITY
CULTURE
PUBLIC ADMINISTRATION
THE BUILT ENVIRONMENT
RESEARCH
ROBOTICS
CULTURAL DIVERSITY, SOCIAL JUSTICE, EQUITY

Figure 5. Expressions of interest across King's for the interdisciplinary workshops

Figure 6. Number of people interested in each interdisciplinary workshop theme

Grant writing workshops

In spring and summer 2024, the Institute coordinated grant writing workshops designed to incubate ideas that came from the interdisciplinary workshops and help colleagues work towards preparing interdisciplinary research bids.

The aim of the grant writing workshops is to produce a one-page treatment for a bid using the Walt Disney brainstorming technique (see Figure 7). This methodology encourages creativity and mimics the pipeline of the grant application. Groups identified three challenges to work on in the workshop, and then approached them in three phases: Dreamer, Realist, and Critic. In the Dreamer phase, all new ideas are encouraged. The Realist phase considers how these ideas might work in practice. The Critic phase examines the ideas and implementation for flaws and problems.

The workshop series launched with two workshops. The Dickson Poon School of Law and the Department of Informatics produced a one-page treatment as an output of the day. A further one-pager is under development as a result of the process bringing together King's Business School and the Department of Informatics.
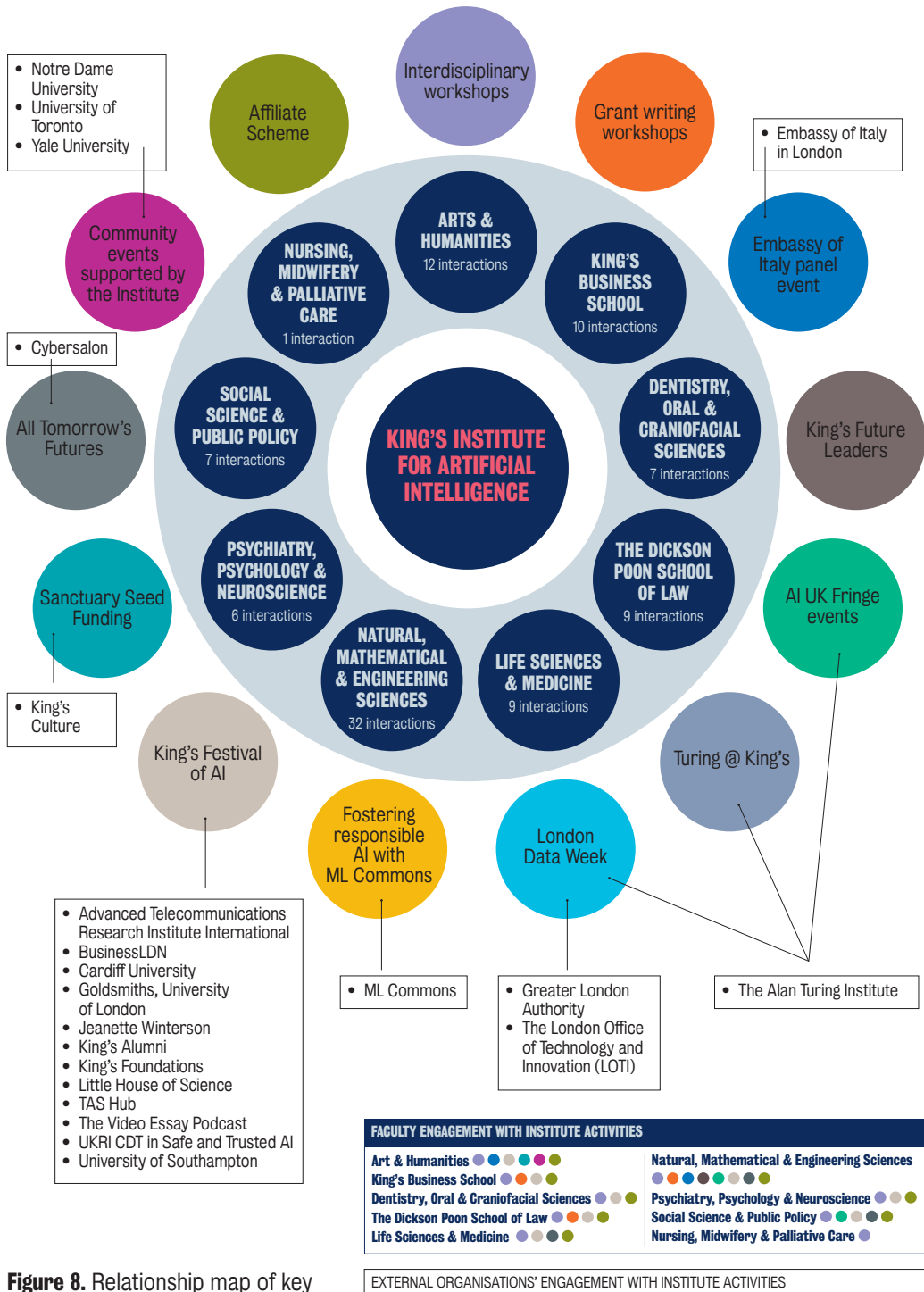
● **If you want to propose grant writing workshops, get in touch at ai-institute@ kcl.ac.uk.**

Figure 7.
Visualisation of the Walt Disney brainstorming technique

REALIST
Organise

CRITIC
Evaluate

DREAMER
Create
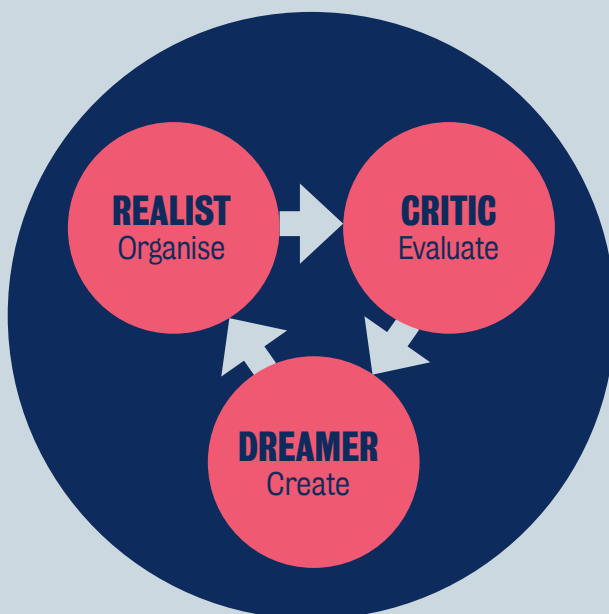
Community events, internal collaborations and Institute support

Figure 8. Relationship map of key 2023–24 Institute activities.

The King's Institute for Artificial Intelligence contributes to a connected and coordinated research community by offering support and collaboration to various internal partners and initiatives. For example, the Institute provided financial support to 'GLoW: Illuminating Innovation', a new exhibition showcasing groundbreaking digital creativity by women in technology from King's project GLoW3 led by Professor Sarah Atkinson. The Institute's contribution supported the commission of artist Violeta Ayala to produce an interactive Augmented Reality (AR) installation where ancestral memories are reimagined through the lens of technology. The Institute also provided seed funding in June 2024 for the research and development phase of a collaboration between Dr Johanna Walker (academic), Lucy Bell (artist) and James Otto (composer) to produce a podcast musical about AI.

The Department of Informatics hosted a research showcase in June 2024 which was open to anyone interested in exploring potential collaborations with academics from the department. The Institute showcased its work to guests during the day.

The Institute also invites requests for support from members of the King's AI community to help them bring together research communities from within King's and beyond around a particular research theme. In 2023–24, the Institute supported several of these across the academic year, including incorporating a workshop on AI-enhanced surveillance organised by Dr Matan Shapiro into the King's Festival of AI.

Other events supported by the Institute this year include 'Professional Datascapes' organised by Professor Crawford Spence and colleagues at the Finwork Futures Research Centre, and 'AI & Ethnicity' organized by Dr Bernard Geoghegan.

'This was a very important event in terms of community building and it built upon the established seminar series run by Finwork Futures over the last 3 years.'
Professor Crawford Spence

Professional datascapes

This was a two-day in-person event bringing together social science scholars exploring datafied professional environments. Presentations covering empirical domains including law, healthcare, the police, journalism and financial services, with speakers joining not only from King's but from research institutions across the world. There were 50 attendees, including King's staff and students, academics from other HEIs, and industry practitioners.

● **Propose an event that supports new or emerging research communities in AI at King's.**
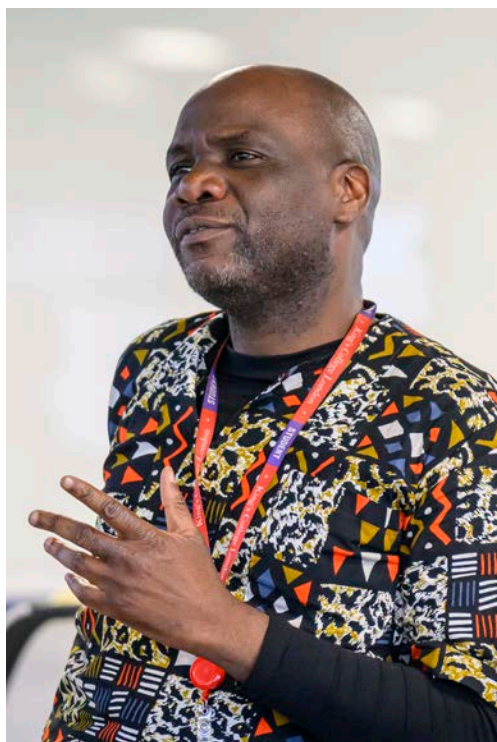
AI & Ethnicity

Two eminent experts in the cultural history of AI delivered talks as part of this online lecture and masterclass, discussing AI's historical and emerging relations to race, ethnicity, and cultural difference. The lectures from Professor Kalinda Vora (Yale University) and Professor Edward Jones-Imhotep (University of Toronto) were open to the public, followed by a masterclass that allowed for a more intimate discussion of the talks and texts that were pre-circulated by the speakers.

There were 60 attendees, with King's staff and students accounting for a third of attendees. The rest were from other universities, including Notre Dame University who will host a follow-up event in autumn 2024.
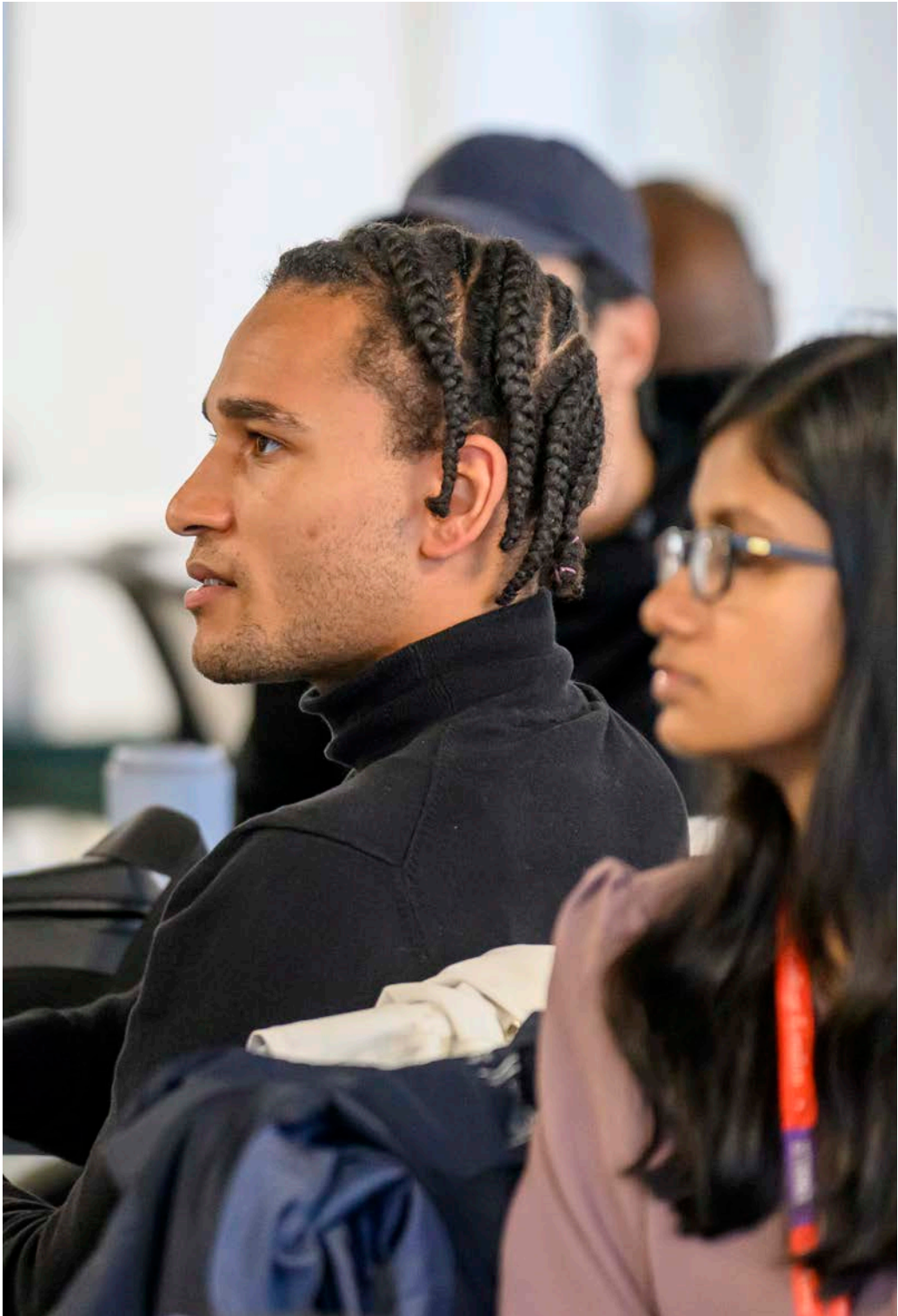
Engagement and external collaborations

The Institute will develop platforms, initiatives and collaborations that enable those working in AI at King's to pursue new knowledge exchange and enterprise activities, to raise the profile of their work outside of academia, and to generate greater opportunities for reach and impact through public engagement activities and activities involving industry. The Institute will provide all-King's representation for external audiences and, where appropriate, partnerships.

Collaborate with the Institute

EVENTS We have an annual programme of events and regularly build relationships with external organisations and collaborate on events.

CONSULTANCY Our academics can provide academic expertise to help you or your business solve an issue, or can provide longer term, strategic advice to help your business.

COLLABORATIVE RESEARCH We actively collaborate with organisations of all sizes and sectors on research projects to boost innovation and develop new products, systems and models. Innovate UK (the UK's innovation funding agency) is a potential funding source for any business-academic partnership.

PROFESSIONAL DEVELOPMENT AND EXECUTIVE EDUCATION
If you're eager to update your skillset, our Professional Development courses are packed with insights and learning that help you fulfil your potential and boost your career prospects. We can tailor our courses to your business needs and offer the flexibility that your business requires. Email **ai-institute@kcl.ac.uk**

We have an annual programme of events and regularly build relationships with external organisations and collaborate on events.

All Tomorrow's Futures panel event, July 2024

Working with us

International collaborations

This year the Institute raised the profile of King's AI research internationally by engaging with the international teaching and research community. In February, the Institute hosted visitors from the UCL Global Business School for Health. They were received by Svitlana Surodina, Entrepreneur in Residence with Ageing Research at King's (ARK), who discussed AI and Data for Preventive Health with the cohort and showcased King's expertise in this area.

In March 2024, the Institute hosted the Embassy of Italy in London for public event called 'AI: will it change the way we look at agriculture, industry and service?' The panel event brought together perspectives on the application of AI to various sectors and considered the possible partnerships between Italy and the United Kingdom.

Reaching new audiences

Through its collaboration with BusinessLDN, the Institute reached an audience of over 80 professionals from across industry, central and local government, academia, and the third sector, and welcomed them to King's for a high-profile panel event featuring speakers from industry, local government, and the Greater London Authority, opened by King's expert and Professor of Practice Sana Khareghani.

In July the Institute hosted two events as part of London Data Week. 'Data Detectives: Decoding Census Data for Local Place-Making' was delivered by Prospect Brixham, a projected supported by the Data Trusts Initiative to establish a community data trust, and 'How Good are AI Language Models in Global Languages?' delivered by the Equiano Institute, a grassroots interdisciplinary responsible AI lab for Africa and the Global South, and General Purpose, an AI training provider for businesses.

London Data Week is a citywide festival which aims to centre London residents in the conversation about data, organised by the Alan Turing Institute, The London Office of Technology and Innovation (LOTI), and the Greater London Authority. These events enabled the Institute to bring new communities to King's and ensure

'The fact that the Embassy of Italy to the UK chose to partner with the King's Institute for Artificial Intelligence and King's College London for the UK meeting of the '2024 Festival dell'Economia di Trento' is witness to our reputation in AI, both for what concerns theoretical research in AI and for what concerns practical applications of AI.' *Professor Luca Viganò, Professor of Computer Science and Vice-Dean (Enterprise and Engagement), Faculty of Natural, Mathematical & Engineering Sciences*

underrepresented voices were present in important conversations around the use of data, with over 70 external attendees joining in-person across the two events and 35 virtual attendees from the Global South for the event on AI language models. This was an opportunity for the Institute to strengthen King's partnership with the Turing and to further collaborate with LOTI and the GLA, strategically enhancing the Institute's external engagement work.

Facilitating collaboration with our affiliates

Through its engagement with external organisations the Institute is able to share a range of opportunities with its affiliates network, from professional development, to speaking opportunities, to consultancy and advisory work.

This year the Institute supported PhD students and academics from our affiliates network to showcase their research at two AI-themed events run by the Royal Institution, a charity dedicated to connecting people with the world of science. One of these was an AI-themed careers event for secondary school students and the other an event on 'AI and the Senses' for six- to twelve-year-olds.

By supporting our affiliates to take up this opportunity the Institute provided a valuable opportunity for public engagement work and also a forum for data-gathering that will directly support with research. It also provided a venue for the next generation of AI researchers to hear from King's experts and to experience first-hand the research opportunities available at the College.

The Institute facilitated the hiring of another King's PhD student as a Research Assistant at London Business School, enabling them to extend their professional network and gain valuable work experience, in turn supporting them in their career development.

The Institute also connected the Institute of Government and Public Policy at the University of East London with a member of our Affiliates Scheme, who delivered a keynote address at their virtual conference on 'The Future of AI in Learning and Education'. By facilitating this opportunity, the Institute ensured that King's expertise and forward-thinking approach in this space was evidenced to an audience of experts.

Affiliates are offered various media opportunities. For example, Professor Elena Simperl from the Faculty of Natural, Mathematical & Engineering Sciences

'As someone who passionately believes that training models in multiple languages is crucial for advancing towards Artificial General Intelligence, I found the discussions incredibly enlightening.' *Event attendee, 'How Good are AI Language Models in Global Languages?*

'It was so great to collaborate with the Royal Institution and to learn about the type of work they do there. Talking about AI research with others is fulfilling and allows me to think more about what I do from other perspectives, which equally helps immensely when considering my thesis project.' *King's PhD student*

'This opportunity helped me build links with researchers from an excellent university and enriched my CV in terms of work experience.' *King's PhD student*

responded to Ukraine's use of AI against Russian disinformation for Newsweek, Dr Canh Thien Dang from King's Business School wrote an editorial for The Innovation Platform exploring the implications of GenAI uses in education, Dr Raquel Iniesta from the Institute of Psychiatry, Psychology and Neuroscience appeared on Inspire FM radio discussing the benefits and risks of AI, and Dr Andrés Gvirtz from King's Business School provided expert commentary to Business Insider about responsible Generative AI.

The Turing University Network

The Alan Turing Institute serves as the UK's national institute for data science and artificial intelligence. The Turing University Network (TUN) was established in 2023 with the aim to create better connections across the data science and AI landscape and promote collaboration among universities in the UK. King's joined the network in April 2023. Many of the aims and priorities of the TUN sit naturally alongside the priority areas of the Institute. In October 2023 the King's Institute for Artificial Intelligence appointed Dr Catherine Healy as Turing liaison for King's, demonstrating King's clear commitment to strengthening the partnership between King's and the Turing and leveraging the benefits of membership to the TUN.

The TUN is a key component of the Turing's Institute Strategy and supports the Institute to achieve its three goals: advance world-class research apply it to national and global challenges, build skills for the future, and drive an informed public conversation. This year the Institute has sought to align its Turing-related activity at King's with these three goals.

The Institute connected the Institute of Government and Public Policy at the University of East London with a member of our Affiliates Scheme, who deliered a keynote address at their virtual conference on 'The Future of AI in Learning and Education'.

● **The TUN is a key component of the Turing's Institute Strategy and supports the Turing to achieve its three goals.**

Advance world-class research

The Turing has identified three grand challenges in key societal areas to focus their activity around: health, environment and sustainability, defence and national security, underpinned by a core capability of tools, people and foundational infrastructure, translating this into commercial and societal benefit.

Turing Fellowships

The Turing Fellowship Scheme aims to grow the data science and AI ecosystem in the UK by supporting, retaining and developing the careers of the next generation of world leading researchers, whilst contributing to the Institute's overarching goals. From 2023–24 onwards, Fellowship calls will be based around one of the Turing's three goals.

Professor Elizabeth Black

Dr Yali Du

Dr Helen Yannakoudakis

Build skills for the future

There is a well-documented AI skills gap in the UK. The Turing seeks to fill some of these gaps by accelerating the transfer of skills and knowledge between academia, industry, government and the third sector at all career levels.

Enrichment Scheme Award

The Enrichment Scheme Award is designed to give PhD students the opportunity to enhance and broaden their research through engagement with the Turing's community and provides the opportunity for them to find and recognise their place within the UK's growing data science and AI research community.

● **Three King's academics were amongst 51 new Turing Fellows in 2023–24: Professor Elizabeth Black, Dr Helen Yannakoudakis and Dr Yali Du. They join King's existing Turing Fellows: Professor Sylvie Delacroix, Professor Nicolas Holliman and Dr Barbara McGillivray.**


'My time on the Enrichment scheme significantly contributed to my career progression. I had the opportunity to meet and learn from incredible multi-disciplinary researchers and participate in a large, collaborative project.' *Madeleine Waller, King's PhD student*

Perspectives from *Professor Yulan He*
Turing Academic Liaison & Turing AI Fellow

Engaging with the Turing Institute offers academics opportunities to better connect with other researchers, industrial partners, and policy makers across the data science and AI landscape. They can participate in Turing schemes and activities, such as Turing Fellowships, Interest Groups, Turing Research Programme calls, and Data Study Groups. This engagement can increase the visibility and impact of their research. Academics also have the chance to contribute to policy development and public discussions on critical issues related to data science and AI. In addition, students and early career researchers can benefit from PhD enrichment schemes and Turing Internship Networks.
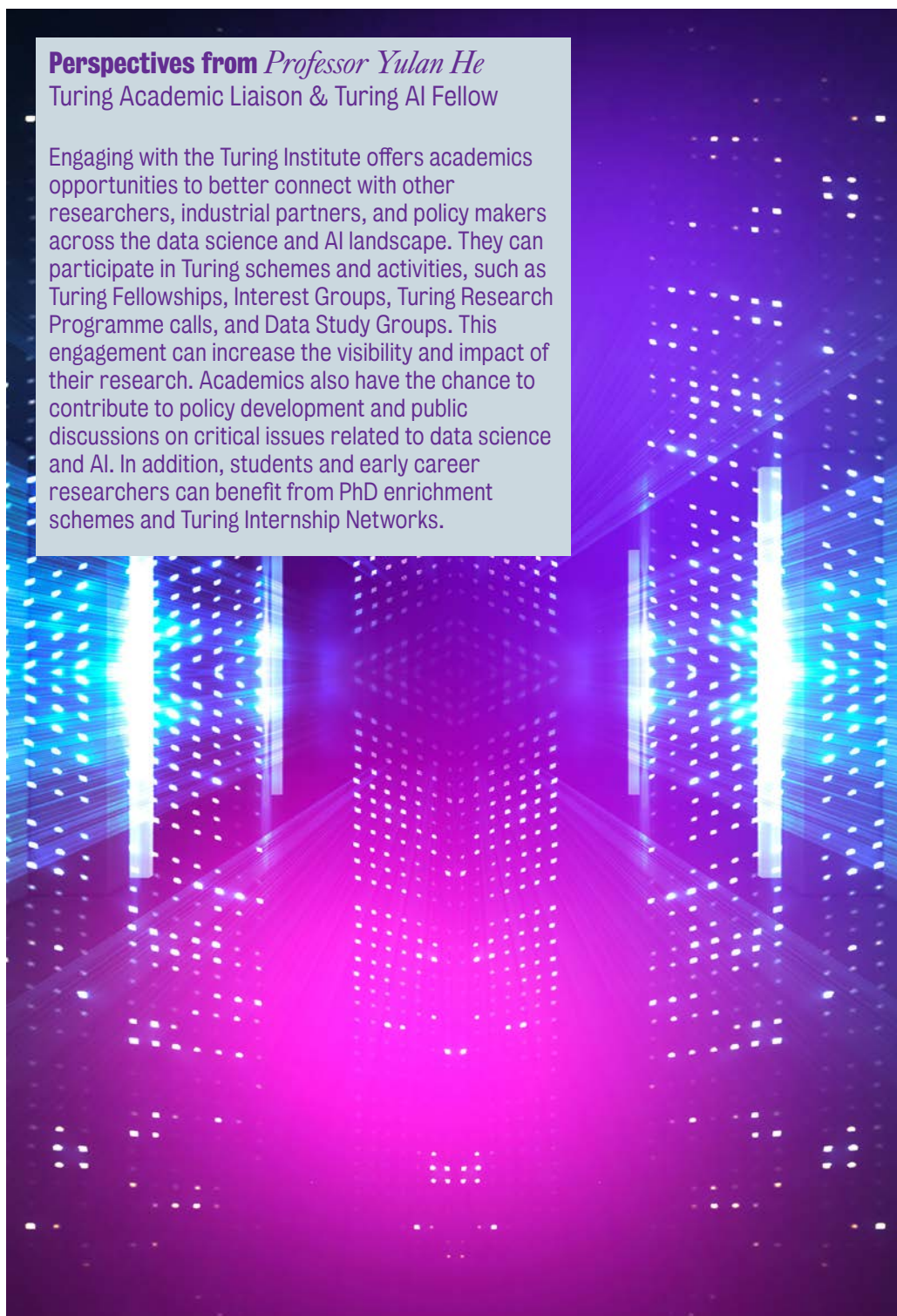
Two King's PhD students were awarded places on the scheme in 2023–24: Madeleine Waller and Yuhan Wang.

Turing Careers Event

In February 2024 the Institute hosted a careers talk, delivered by The Brilliant Club on behalf of the Turing. The event introduced 35 undergraduate and taught postgraduate students to the range of Data Science and AI roles in government and research, and highlighted the importance of diversity in this sector.

Undergraduate internship

For the first time, in the 2023–24 academic year the Turing offered undergraduate students who met certain widening participation criteria the opportunity to apply for a Defence and Security internship. The aim of these internships is to increase participation in data science careers from people who are from underrepresented backgrounds with a focus on those from a lower socio-economic background. One King's undergraduate student was successful in applying to the eight highly sought after internships which commence in summer 2024.
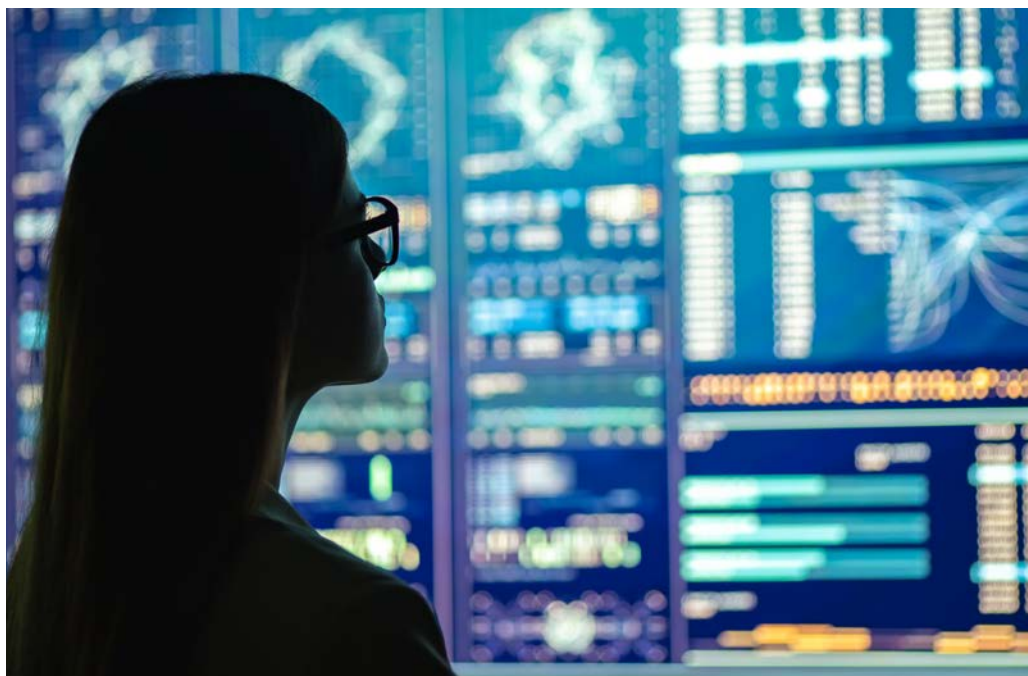
Drive an informed public conversation

Public perceptions of data science and AI vary widely, and the Turing seeks to provide balance, speaking to both the technical, and social and ethical dimensions of these technologies, presenting both the positive opportunities as well as the risks.

AI UK Fringe Events

King's took part in the AI UK Fringe by delivering two events in the same month as AI UK, the UK's national showcase of data science and AI research and innovation. These were public events designed to be accessible to non-experts:

- AI and environmental activism, delivered by Dr Sebastián Leheude, Lecturer in Ethics, AI and Society in the Faculty of Arts & Humanities.
- AI and Space Innovation, delivered by Professor Yang Gao, Professor of Robotics in the Faculty of Natural, Mathematical & Engineering Sciences.

Theory and Method Challenge Fortnights Public Lecture

In June 2024, as part of the Turing's Theory and Method Challenge Fortnights, King's hosted a public lecture delivered by the Turing entitled 'Rigour, imagination & production in data-driven science', featuring three international speakers. There were 90 attendees to the event, which was followed by a networking drinks reception.

'Excellent event, learned a lot… and the discussion was thought provoking and insightful.' *AI UK Fringe event attendee*

'Very informative and interesting talk with a varied and engaging panel afterwards.' *AI UK Fringe event attendee*

The King's Festival of Artificial Intelligence 2024

Between 21 and 25 May 2024, the King's Festival of Artificial Intelligence returned to King's Strand Campus and welcomed over 1500 people to explore the latest advancements and discussions in AI at lectures, panel events, demonstrations, screenings, performances and more. All events were open to the public and they covered an array of topics, including philosophy, social justice, healthcare, education, sustainability, responsibility, creativity, and intelligence itself.

Festival highlights

Professor Shitij Kapur, Vice-Chancellor & President of King's College London, opening the festival.

'The Festival not only enhances King's reputation and standing in AI research but also emphasises our commitment to leveraging technology for the benefit of humanity, the environment, and the nation's prosperity.' *Professor Bashir Al-Hashimi, Vice President (Research & Innovation), King's College London*

AI. ART. YOU.

Award-winning author Jeanette Winterson delivered a compelling keynote speech on the opening day of the Festival, exploring why AI needs the arts. She made a rallying call to the audience that AI 'isn't just for the tech bros and the closed AI conferences. It's got to be something for all of us to understand and think about… this is your world, and you need to be part of it. For the many, not the few.' This argument reflected one of the festival's key objectives: to bring new audiences into King's and invite them to learn from research developments in AI and contribute to the urgent questions raised by the developments in these technologies and their applications.

CAN LONDON LEAD THE WAY IN AI?

Hosted in collaboration with BusinessLDN, a panel of industry experts, thought leaders and innovators sought to answer the question 'Can London lead the way in AI?', providing a lively discourse exploring the potential for London to become a global leader in AI innovation and implementation.

CARR CRASH: AI STAND-UP COMEDY

Professor Leslie Carr of the University of Southampton and Ruby Carr performed their comedy show Carr Crash which asked, 'Is it easier to teach computers or teenagers to act like humans?'

KEYNOTES FROM KING'S

The festival programme brought together academics from across King's to deliver public keynote lectures.

- **Professor Sylvie Delacroix** from The Dickson Poon School of Law explored the role that participatory infrastructure can play in making the 'AI revolution' socially sustainable

- **Professor Oguz A. Acar** from King's Business School shared the ways Generative AI can reshape education

- **Professor Luca Viganò** from the Faculty of Natural, Mathematical & Engineering Sciences outlined to a younger audience how fairytales illustrate key concepts of AI and cybersecurity

- **Dr David Brydan** from the Faculty of Arts & Humanities examined how understanding the history of intelligence can help us think about AI and its place in our world today

- **Dr Sanjay Modgil** from the Faculty of Natural, Mathematical & Engineering Sciences suggested answers to the question 'Can, will and should machines be conscious?

Evaluating the Festival

Building on the successes of the inaugural festival in May 2023, the Institute set seven overall objectives for the festival. These objectives support three of our four areas of strategic priority:

- **Enable a Connected and Coordinated Research Community**
- **Provide New Opportunities for Engagement and External Collaborations**
- **Raise King's AI Profile by Increasing Internal and External Visibility**

The seven objectives for Festival 2024 were:

OBJECTIVE 1

To bring new audiences to King's
- 1500+ visitors over 5 days
- 60 per cent of attendees were external to King's

OBJECTIVE 2

To educate and inspire
- 78 per cent of festival attendees said they learned something new
- 92 per cent of Family Zone attendees agreed or strongly agreed that they learned something new
- 85 per cent of attendees said they felt inspired by the event(s) they attended

OBJECTIVE 3

To remove barriers to AI research and allow participation in AI conversations and research
- 18 interactive demos across demo day and Family Zone
- 80 per cent of attendees had no degree level knowledge of AI

OBJECTIVE 4

To bring the AI at King's community together in new fora
- 129 presenters from across eight of King's nine faculties
- All career levels participated
- 20 per cent of festival presenters were early career researchers
- Participants included UG, PGT, PGR and clinicians

'I really appreciated this being a free event. Thank you.' *Festival attendee*

'Thank you for keeping these events open to all members of the public.' *Festival attendee*

'Everyone at the demonstrations was brilliant, but all the PhD students were particularly impressive, very personable, and knowledgeable about their work.' *Festival attendee*

OBJECTIVE 5

To establish a platform for public engagement, knowledge exchange and impact

- 89 per cent of events were suitable for the general public, with the remainder targeted at a specialist audience
- Academics contributing to the festival programme listed the following motivations for taking part
  - Testing their research with the public
  - Engaging the public in AI research
  - Gain insights and feedback from users
  - Public orientation of AI debates
  - Make AI research more accessible
  - Achieve community impact

OBJECTIVE 6

To foster links with external organisations, industry and alumni

- External collaborations with BusinessLDN, Little House of Science
- 12 external organisations or individuals were involved in the programme
- A further 17 external individuals took part in panel events or other events

OBJECTIVE 7

To raise the profile of AI at King's and the King's Institute for AI

- 60 per cent of attendees were external to King's
- 62 per cent external attendees had not heard of King's Institute for AI before discovering the Festival
- Almost 24,000 page views across the festival events pages on the King's website
- The event 'Machine Vision & Cinema' has been made available as an episode of podcast series 'The Video Essay', hosted and produced by Will DiGravio
- Many festival events have been made available to the public on the Institute's YouTube channel

● **Recorded public lectures on our YouTube Channel**

'I participated in 4 events that day. They were all engaging and interesting, and I definitely learned something new from each one. Thank you for this opportunity and opening your doors to the public.' *Festival attendee*

'Please do make sure King's continues the AI festival as a major HEI we have a responsibility to be present in the AI conversation.' *Festival attendee*

'I extend my gratitude and sincere thanks to all the brilliant minds we met at the event. The passion and patience of the students are commendable and I would like to provide special emphasis on the great work by students who did the Robotic arm experiment!' *Festival attendee*

TARGET	ACHIEVEMENT	MEASURE
1,200 attendees		1,530 attendees
Collaborate with at least 2 external organisations		BusinessLDN, Little House of Science
65% of sessions suitable for the general public		89%
10% of sessions to be ECR led		20%
Strengthen internal collaborations and partnerships		New collaborations and links with King's Climate & Sustainability, Centre for Sustainable Business, King's Alumni and more

To support the Festival's value in terms of these seven objectives, the Institute set itself a series of targets. The targets aimed to guide preparations and delivery of the Festival in 2024.

Interactivity and inspiration: demo days, workshops and Family Zone

There were a variety of opportunities for festival-goers to get hands-on experience with AI and the questions King's researchers are asking. On the opening day of the Festival, seven groups of researchers from King's and beyond showcased their work on topics as broad as autonomous service robots for the home, digital divination, AI art creation for mental health, finding blind-spots in AI, and how generative AI can 'resurrect' our deceased ancestors. PhD students from the UKRI Centre for Doctoral in Training in Safe and Trusted AI delivered a series of demonstrations, looking at uncertainty, the future of music, and video games. Commenting on their experience demonstrating 'Super Mario Bros: The Turing Quest' where the public were asked to guess if they were watching an AI or a human play Super Mario Bros, Nathan Schneider Gavenski, Michelle Nwachukwu and Jack Contro said: 'Talking to a public that is not PhD students and King's academics is a great opportunity to expose ourselves to new ideas and gain different perspectives on our research.' There was also a performance of AI-generated songs by Algorithmix, a band that included PhD students from the UKRI Centre for Doctoral Training in Safe and Trusted AI.

What does AI mean for staff and students at King's? This question was explored by several events within the programme that addressed the potential for AI to personalise educational experiences, foster creative thinking, and develop critical AI literacy. Martin Compton convened a panel titled 'AI in Higher Education: Tales from the Coalface', in which colleagues from across the university discussed the challenges and opportunities of integrating AI into educational practices. Professor Oguz A. Acar delivered a keynote lecture on the ways Generative AI can shape education. There were also opportunities for academics to share the ways they use AI to improve the educational experience at King's. Dr Kieran O'Halloran hosted an interactive workshop sharing innovative approaches deploying Generative AI for developing creative thinking, based on an undergraduate module he developed. Academics and students from the Faculty of Dentistry, Oral & Craniofacial Sciences and the Faculty of Natural, Mathematical & Engineering Sciences shared the co-creation process of AI-generated

'Talking to a public that is not PhD students and King's academics is a great opportunity to expose ourselves to new ideas and gain different perspectives on our research.' *Nathan Schneider Gavenski, Michelle Nwachukwu & Jack Contro*

● For those who missed the festival or wish to revisit the events, recordings are available on the King's Institute for Artificial Intelligence YouTube channel.

digital dental patients which have allowed for the personalisation of Dentistry education.

A sold-out Family Zone concluded the 2024 King's Festival of AI. The Family Zone was a free, family-friendly exploration of AI, offering hands-on activities that captivated children aged four and over (and their parents and guardians). Children could learn how AI can be inspired by nature, how to use maths to make sure driverless cars are safe on the road, and how to build a robotic arm with King's Robotics students. Activities also allowed children to try and design a pattern to trick AI face-detection systems, race against a driverless car in a session developed by student society KCL Tech, play board games and video games created by AI, contribute to building and training a simple AI programme via drawings of dogs, birds and fish, and learn more about chatbots and the ethical challenges involved. They could also design and build a sensational recycled robot model in a creative drop-in workshop run by workshop artist and designer Katie Kennedy.

Internal and external visibility

Visibility of the Institute and AI at King's underpins the success of our efforts. The Institute will create and promote a coherent external presence for AI at King's, showcasing work and activity across the breadth of the university. Achieving this requires internal recognition of the Institute as a vehicle for raising the profile of AI work at King's and therefore implicitly includes a pre-requisite for the Institute to hold sufficient internal visibility to be highly discoverable as a focal point for AI.

Events

The King's Institute for Artificial Intelligence runs an annual programme of events. The programme consists of:
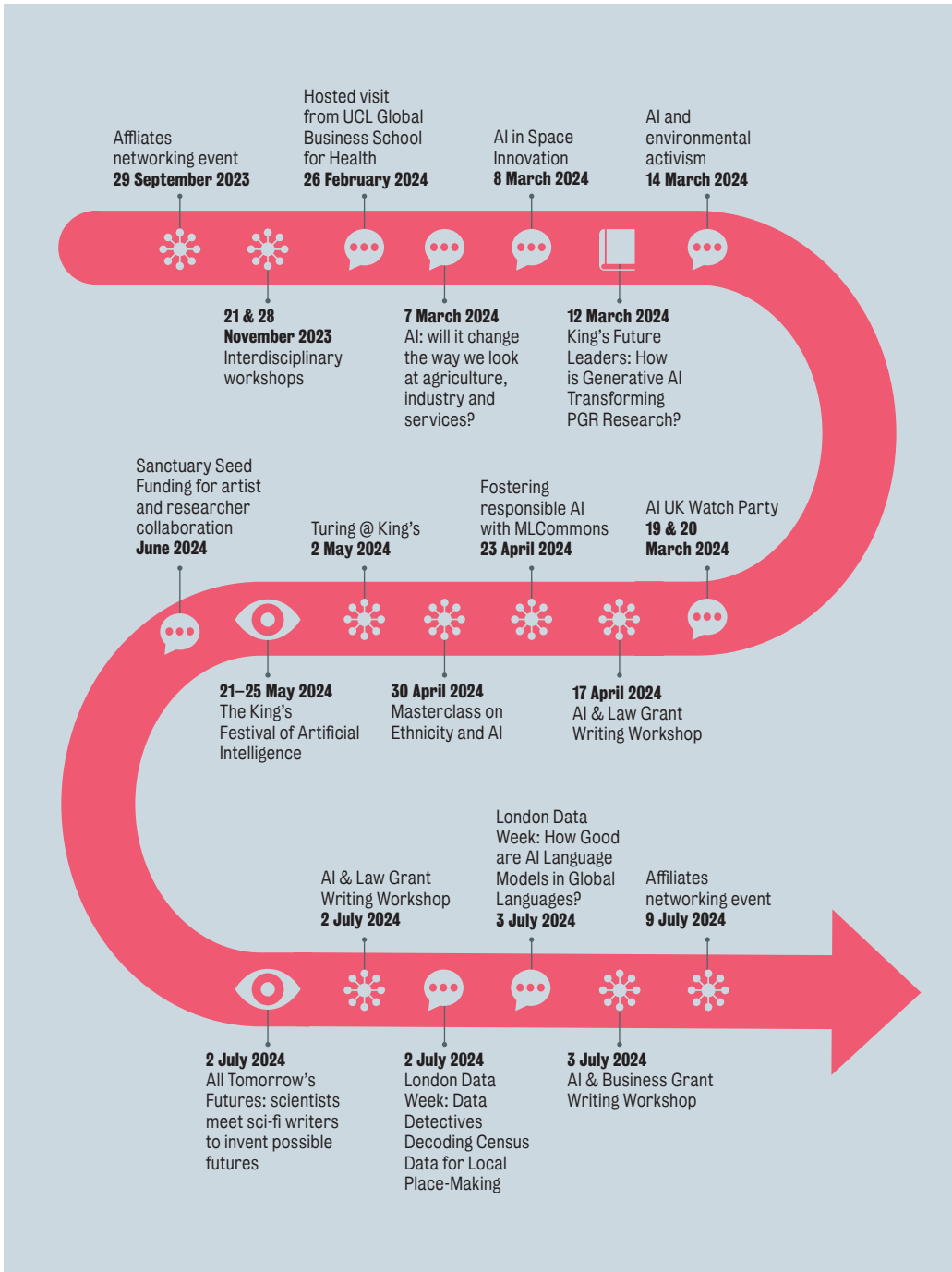
COMMUNITY EVENTS Primarily for internal audiences (but with invited guests from industry and the wider academic community), these events bring together the AI communities at King's around new and emerging research problems. The events allow multi-disciplinary discourse, foster new collaborations and raise the profile of new and emerging research at King's.

PUBLIC EVENTS These events aim to raise the profile of King's research and education outside of the university, stimulate new external relationships and position King's as a key contributor to urgent debates surrounding AI.

In 2023–24, the Institute delivered, co-hosted or supported 47 events, seen below mapped to the Institute's four priority goals.

PRIORITY AREA	ACTIVITIES	ACTIVITY TITLE
A CONNECTED AND COORDINATED RESEARCH COMMUNITY	10	• Affiliate networking events 2 • Interdisciplinary workshops 2 • AI & Law Grant Writing Workshop 2 • Fostering responsible AI with ML Commons • Masterclass on Ethnicity & AI • Turing @ King's • AI & Business Grant Writing Workshop
ENGAGEMENT AND EXTERNAL COLLABORATIONS	8	• Hosted visit from UCL Global Business School for Health • AI: Will it change the way we look at agriculture, industry and services? • AI in Space Innovation • AI and Environmental Activism • AI UK Watch Party • Sanctuary Seed Funding for artist and researcher collaboration • London Data Week events 2
INTERNAL AND EXTERNAL VISIBILITY	28	• The King's Festival of Artificial Intelligence events 27 • All Tomorrow's Futures: scientists meet sci-fi writers to invent possible futures
EDUCATION AND TRAINING	1	• King's Future Leaders: How is Generative AI transforming PGR Research?

Affliates
networking event
29 September 2023

Hosted visit
from UCL Global
Business School
for Health
26 February 2024

AI in Space
Innovation
8 March 2024

AI and
environmental
activism
14 March 2024

**21 & 28
November 2023**
Interdisciplinary
workshops

7 March 2024
AI: will it change
the way we look
at agriculture,
industry and
services?

12 March 2024
King's Future
Leaders: How
is Generative AI
Transforming
PGR Research?

Sanctuary Seed
Funding for artist
and researcher
collaboration
June 2024

Turing @ King's
2 May 2024

Fostering
responsible AI
with MLCommons
23 April 2024

AI UK Watch Party
**19 & 20
March 2024**

21–25 May 2024
The King's
Festival of Artificial
Intelligence

30 April 2024
Masterclass on
Ethnicity and AI

17 April 2024
AI & Law Grant
Writing Workshop

London Data
Week: How Good
are AI Language
Models in Global
Languages?
3 July 2024

Affiliates
networking event
9 July 2024

AI & Law Grant
Writing Workshop
2 July 2024

2 July 2024
All Tomorrow's
Futures: scientists
meet sci-fi writers
to invent possible
futures

2 July 2024
London Data
Week: Data
Detectives
Decoding Census
Data for Local
Place-Making

3 July 2024
AI & Business Grant
Writing Workshop

**A CONNECTED AND
COORDINATED RESEARCH
COMMUNITY**

**ENGAGEMENT
AND EXTERNAL
COLLABORATIONS**

**EDUCATION
AND
TRAINING**

**INTERNAL AND
EXTERNAL
VISIBILITY**

'ALL TOMORROW'S FUTURES: SCIENTISTS MEET SCI-FI WRITERS TO INVENT POSSIBLE FUTURES'

In early July, the Institute hosted a book launch for 'All Tomorrow's Futures: Fictions That Disrupt'. The Institute was joined by contributing academics from King's (Dr Christine Aicardi, Professor Elizabeth Black and Professor Claire Steves) and the editors of All Tomorrow's Futures (Benjamin Greenaway and Stephen Oram). They discussed the methodology and ideas behind the sci-fi anthology, a 'thrilling ride through diverse speculative landscapes, mixing the best elements of fun and imaginative story telling with real-life insight from top practitioners.'

The book launch attracted 65 attendees, both in-person and online. Many of the in-person attendees provided positive feedback on the discussions held during the event.

'Excellent event, great chairing and very impressive panel of speakers.'

'I thought it was an incredibly insightful and thought-provoking panel talk.' *Anonymous feedback from All Tomorrow' Futures: scientists meet sci-fi writers to invent possible futures event*

Nao
Exhibited with kind permission of the
Department of Informatics, King's College London

Reimagining AI futures

How can we democratise AI so it works for everyone? What are the hidden costs of the AI revolution? How should we regulate AI and how do we create AI that is safe and trusted from conception through to delivery?

These are some of the questions tackled in a video series by experts from the Department of Informatics, as we look to reimagine what different futures for AI might look like. The Institute collaborated with the Faculty of Natural, Mathematical & Engineering Sciences to produce these videos and accompanying blog posts from four AI academics in the run up to the AI Safety Summit hosted by the United Kingdom in autumn 2023.

AI spotlights

In the 2023–24 academic year, the Institute started the 'AI Spotlights' series where academics from across King's are interviewed and share their career journeys so far. The series aims to showcase the breadth of AI research at King's and the diversity of researchers and their backgrounds too. Dr Mike Cook, Professor Oguz A. Acar, Dr Antonio Forte, and Professor Elena Simperl have participated so far, and this series is supported by central King's communications channels to further amplify and share the stories.

In the 2023–24 academic year, the Institute started the 'AI Spotlights' series where academics from across King's are interviewed and share their career journeys so far.

Online presence

CHANNEL	2023–24	% CHANGE
Website	16,174 page views	121% increase compared to 2022–23
Twitter/X	1,796 followers	42% increase compared to June 2023
LinkedIn	Average 9,000 impressions per month 2,037 followers	121% increase compared to 2022–23
Round-up (internal newsletter)	464 followers	123% increase compared to June 2023

Dissemination of public engagement activities

A recent study by Universities UK has shown that universities are engaging with more people through public engagement than ever before. They see this as an opportunity to directly engage with young people who may go on to join university later in life. The Institute supports this and sees public engagement as a core part of its mission.

'*Universities are reaching more people through public engagement. Attendance and engagement figures grew from over 528 million to over 544 million between 2021–22 and 2022–23. While this represents an overall increase of 3 per cent, the increase in viewing, listening and download figures for university produced content has increased by nearly 11 per cent in the same timeframe.*' 'New data shows universities open their doors to local communities', Universities UK, June 2024

'*Watching or listening to university produced content can spark an interest in learning that continues throughout life. It can raise the aspirations of a young student or make university seem less overwhelming to somebody considering returning to education as an adult.*' 'New data shows universities open their doors to local communities', Universities UK, June 2024

● **Recorded public lectures on our YouTube Channel**

● **Art and AI podcasts with National Gallery London and King's College London**

● **Daniel Chavez Heras on The Video Essay Podcast**

Education and training

The Institute will use its networks and channels to support better connectivity and strategic development of educational offerings for King's learners at all levels, support the translation of research into teaching and pedagogy, and develop education and training packages to benefit business and public sector organisations and foster new external partnerships.

King's Department for Informatics is home to the BSc/MSc Artificial Intelligence which welcomed its first intake in 2023-4. Perhaps unsurprisingly, many of King's research strengths in healthcare technologies, natural language processing, AI & law, and philosophy and ethics are shaping curriculum developments across the college.

King's UKRI funded Innovation Scholar's programme has an AI 'pillar' of learning content developed by King's AI Centre for Value Based Healthcare. The target audience is researchers, healthcare professionals and industry partners.

This academic year, a new, free MOOC, 'Generative AI in Higher Education', was designed by King's Academy and developed by King's Digital, and has received a content refresh to reflect the rapidly changing environments of both AI and HE. The course is delivered by Dr Martin Compton, Dr Charlotte Haberstroh and Professor Oguz A. Acar. There have been over 7700 participants since the course launched and 149 countries represented amongst participants.

Colleagues in King's Academy and elsewhere across the university are putting considerable thought and effort into pedagogy in the context of AI and the ways in which higher education responds to, and can harness, the developments in AI. Representatives from the Institute participate in the AI EDU working group, sharing updates and opportunities and using our communications channels and affiliates to support this important work.

Looking ahead

The Institute can celebrate much in the work it has undertaken against three of its four priority areas outlined on page 8. It will continue to drive forward activity to connect our AI community at King's, build external relationships and raise the profile of AI at, and beyond, King's. The Institute is looking forward to launching new activity in education and training.

The Institute is beginning to develop CPD offerings and executive education in AI. The rapid developments in AI impact on business and society, and there is a need for individuals and organizations to upskill. King's, with its focus on bringing together multidisciplinary expertise around real-world problems, its focus on service, and on external engagement, is well-placed to make meaningful interventions in this space.

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INSTITUTE OPERATIONS

Dr Rose Hepworth
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Dr Catherine Healy
Turing Partnership Manager

Jess Keating
Communications & Engagement Manager

Karly Maxwell
Senior Business Operations Officer

Contact us via
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STEERING GROUP 2023–24

Dr Mads Bergholt
Senior Lecturer in Biophotonics, Faculty of Dentistry, Oral & Craniofacial Sciences

Dr Stefan Bernritter
Reader (Associate Professor) of Marketing, King's Business School

Dr QueeLim Ch'ng
Reader in Systems Biology and Neuroscience, Institute of Psychiatry, Psychology & Neuroscience

Dr Martin Chapman
Lecturer in Health Informatics, Faculty of Life Sciences & Medicine

Dr Arianna Ciula
Director & Senior Research Software Analyst at King's Digital Lab, Faculty of Arts & Humanities

Professor Richard Dobson
Professor of Medical Bioinformatics and Head of Department for Biostatistics and Health Informatics, Institute of Psychiatry, Psychology & Neuroscience

Professor Mateja Durovic
Professor of Law and Technology and Director of the Centre for Digital Law, The Dickson Poon School of Law

Dr Crina Grosan
Senior Lecturer, Florence Nightingale Faculty of Nursing, Midwifery & Palliative Care

Dr Robert Knight
Reader in Developmental Genetics, Faculty of Dentistry, Oral & Craniofacial Sciences

Professor Paul Luff
Professor in Organisations and Technology, King's Business School

Dr Scott McLachlan
Lecturer in Digital Technologies for Health, Florence Nightingale Faculty of Nursing, Midwifery & Palliative Care

Professor Mark Mulligan
Professor of Physical & Environmental Geography, Faculty of Social Science & Public Policy

Professor Kenneth Payne
Professor of Strategy, Faculty of Social Science & Public Policy

Professor Bipin Rajendran
Professor of Intelligent Computing Systems, Faculty of Natural, Mathematical & Engineering Sciences

Dr Marina Riabiz
Lecturer in Statistics, Faculty of Natural, Mathematical & Engineering Sciences

Professor Joanna Zylinska
Professor of Media Philosophy + Critical Digital Practice and Interim Director for the Centre for Attention Studies, Faculty of Arts & Humanities