

Contents

Director's introduction	2
Planning for the future	4
Building the DSI community	7
Internal networks	
External influence	10
Research	13
Research highlights	14
Selected publications	18
Education	21
Undergraduate teaching	21
PhD research	22
Extended education	22
Engagement	25
Events	25
Event highlights	26
Communications	27
Selected blogs	28
The DSI community	30
Appendix DSI events 2024/25	39

Director's introduction

The past year has been an exciting and eventful one for the Data Science Institute (DSI), as we build on the solid foundations established by our Inaugural Director Professor Ken Benoit and the excellent team he created. We have grown activity across all dimensions of our mission to convene, catalyse, and communicate the London School of Economics and Political Science's (LSE) world-leading activity in data science, through community-building, partnership development, research, education, and public engagement.

At the heart of DSI lies our flourishing community. Our Faculty Affiliate Network has grown to around 100 members. It brings together colleagues from across LSE and reflects the extraordinary range and quality of work that spans fundamental methodological research, innovative applications in social scientific research, and critical examination of how new technologies are reshaping the economy and society.

A particularly exciting development has been the establishment of our PhD Affiliate Network, a community of over 50 doctoral researchers who have established their own committee and launched a dedicated seminar series to share their work. The enthusiasm and exceptional quality of work from our PhD Affiliates continues to enrich LSE's

contributions to the field, bringing fresh perspectives and innovative approaches.

We have also strengthened our academic profile through strategic visiting appointments, bringing world-class expertise in artificial intelligence (AI) and related fields directly into the Institute. These appointments enhance our profile and capacity, and provide useful connections for our growing community of students and researchers.

We collaborate with and support a growing network of departments, research institutes, centres, and initiatives across LSE. This report details these collaborations which include hosting a project with LSE Cities and Ordnance Survey, co-leading the GENIAL research project examining generative AI (GenAI) in education, partnering with

the LSE International Growth Centre on evidence-based policymaking in Zambia and jointly hosting an LSE and Peking University conference on AI in education. The report also includes descriptions of coordinated projects with the Global School of Sustainability Transition Pathway Initiative and the Marshall Institute's 100x Impact Accelerator.

The Institute continues to cultivate external partnerships. Our relationships with Imperial College London, CIVICA the European University of Social Sciences and The Alan Turing Institute continue, while new collaborations with universities including King's College London and NOVA University Lisbon have expanded our reach. New and growing connections with organisations such as the International Association for Quantitative Finance ensure our research remains connected to real-world applications and industry needs. 2025 saw the launch of an exciting partnership between LSE and Anthropic to provide all LSE students with access to its Claude AI technology, strengthening the School's prominent role in shaping the implications of AI in higher education, society, and the world.

The DSI's educational mission has also expanded. The introduction of an undergraduate course on advanced data manipulation, created in direct response to student demand, exemplifies our commitment to responsive curriculum development. Enrolment on DSI courses has grown significantly – nearly quadrupling over four years from 85 to 338 – reflecting the growing relevance of data science methods in social science research and education. Our Careers in Data Science events and student visits to institutions like the Bank of England provide essential links between academic learning and professional practice.

Public engagement remains central to our mission and has reached new heights this year. The comprehensive redevelopment of our website now showcases the full breadth of Al-related research, education, and events across LSE, making our work more accessible to diverse audiences. Our extensive programme of public lectures and events has expanded significantly, reaching growing audiences both in person and online. This year's programme included notable contributions to the LSE Festival, which explored the theme "Visions for the Future". Our expanding social media presence has extended our impact beyond traditional academic boundaries, engaging with policymakers, practitioners, and the broader public in meaningful conversations about the future of Al and data science

The achievements outlined in this report reflect the extraordinary dedication and expertise of our entire, School-wide, community, the guidance and support of our Advisory Board and the outstanding work of the DSI team. The continued generous support of our donors, including LSE alumnus and Council member Stuart Roden and his family, have been instrumental in enabling these successes.

Looking ahead, we have ambitious plans for the development of the Institute, designed to support LSE in meeting the exciting and evolving challenges and opportunities in this rapidly advancing field. We are pleased to have Professor Helen Margetts and Professor Cosmina Dorobantu join us as DSI Senior Advisers, bringing deep expertise at the intersection of the social sciences and Al. Their guidance will help shape our strategic direction and support the development of new research programmes and partnerships. With this strengthened leadership and a growing, engaged community, the DSI is now entering an exciting new phase - one focused on scaling our impact, deepening our integration across LSE, and advancing our mission to shape how new technologies serve society for the good of all.



Professor Martin Anthony Director, DSI

Planning for the future

Al is about people. The most sophisticated Al models are trained on trillions of units of text that capture human communication, behaviours, and interactions. And Al advancement affects people. It is changing our economies and societies, our interactions, our institutions, our ways of living and learning. The centrality of humans to Al means that the social sciences have a fundamental role to play in our technological future. They offer us the academic lens through which we can understand people, from individual behaviours to the complex socioeconomic systems that we created. As Al systems increasingly learn from, interact with, and impact people, this understanding becomes not just valuable, but essential to Al advancement.

In this context, where the social sciences emerge as a vital component of Al's future, there is an opportunity which LSE is uniquely positioned to seize. As one of the highest-ranking social science universities internationally, LSE has both the ambition and the responsibility to play a leading role in guiding Al advancement and in understanding our Al-powered world. LSE's advantage lies not only in its depth across traditional social science disciplines, but also in its world-leading academics who specialise in the fundamental methods that underpin discovery in the social sciences: mathematics, statistics, methodology, and philosophy. This powerful combination positions LSE perfectly to

lead research at the intersection of AI and the social sciences and to ensure AI advancement serves the greater good.

Meeting our ambition requires a bold vision for the future of the DSI. Working with colleagues across the School, we are positioning the DSI as the engine of LSE research on AI and data science. We will shape AI advancement and innovation by leveraging social science insights; drive forward research that shines a light on the most consequential impacts of AI on our economies and societies; embed AI tools and methodologies throughout the social sciences; and create novel datasets, evidence banks, and innovative AI-powered research methods. The DSI will fund doctoral and postdoctoral

researchers across the School, bring world-leading researchers to LSE as academic visitors, and embed industry experts into research teams through our visiting practitioners' programme.

The DSI will also transform how we educate the next generation of AI leaders. Our PhD Affiliate Scheme and expanded educational offerings will ensure our graduates understand both the technical capabilities of AI and its profound socioeconomic impacts. Our professional and executive education programmes will equip practitioners across sectors with the knowledge needed to capitalise on the opportunities of AI and navigate the challenges ahead.

Beyond research and education, we will use LSE's convening power to foster much-needed dialogue across the Al ecosystem. We will bring together the full spectrum of AI stakeholders technologists, policymakers, industry leaders, civil society advocates, and the public - to discuss Al's trajectory. LSE's independence and reputation for rigorous, balanced analysis makes us the ideal neutral ground for these conversations. Through our events, reports, and public engagement programme, we will ensure social science insights reach the widest possible audience and inform the decisions that matter most for our Alpowered future.

Philanthropy will play an important role in the DSI's future. LSE's Philanthropy and Global Engagement Team is providing crucial support to realise our vision as part of the School's Shaping the World fundraising campaign.

The convergence of AI and the social sciences represents one of the most exciting intellectual endeavours of our time. This is our moment to demonstrate that the most profound technological advances emerge not from algorithms alone, but from a deep understanding of the economies and societies they will transform. Our ambition at LSE is not only to advance academic knowledge, but to forge a future where technology and humanity advance together.







Professor Martin Anthony
Director. DSI

Professor Cosmina Dorobantu Senior Adviser, DSI

Professor Helen Margetts OBE Senior Adviser, DSI 66

We are living through a moment of technological promise that has the potential to reshape our economies, our institutions and our daily lives. As a global leader in the social sciences, LSE brings a critical perspective to the development and deployment of AI, which like all new technologies, must ultimately be about people and society.

The Data Science Institute exemplifies this approach by convening researchers from across disciplines, embedding data science into the heart of social science inquiry and ensuring that our insights inform real-world policy and business decisions. DSI's vision for the future – including its ambitious plans for expansion into a comprehensive centre for research and real-world impact on issues of technology and society – will position LSE at the forefront of the global debate on the subject."

Professor Larry Kramer

President and Vice Chancellor
The London School of Economics and Political Science



Building the DSI community

Central to the DSI is a dynamic and growing community that brings together expertise in data science, Al and social science. This intersection is where technical innovation meets critical social insight enabling research, education and engagement activities that address the most pressing challenges of our time. Over the past year, we have nurtured new networks across the School and strengthened our global presence to position the DSI as an institutional cornerstone of data science and AI at LSE and beyond.

Internal networks

DSI Faculty Affiliate and PhD Affiliate networks

This year the DSI Faculty Affiliate
Network has flourished with
membership almost doubling and
representation from 27 different
departments, research institutes, centres
and initiatives across the School. Faculty
Affiliates have come together to help
formulate the future direction of the
Institute and have showcased their
rich and varied work through a range of
public and research events.

Our newly established PhD Affiliate Network has extended our community, bringing together more than 50 PhD researchers from across LSE. Facilitating this interdisciplinary networking has already led to new collaborative projects and interesting connections.

Research and teaching support

Our research team has provided consultancy and technical support to DSI Faculty Affiliates and PhD Affiliates across LSE. By offering advice on AI and computational methods, data manipulation and analysis, and the use of large language models (LLMs), we have strengthened the technical foundations of their work and supported the development of innovative, datadriven research across LSE. We have also worked closely with LSE's Data and Technology Services (DTS) on advancing computing infrastructure and services, especially in the area of cloud computing for data science research and teaching.

Our Data Visualisation Studio is a valued resource for partners across the School. It is regularly used by the

Department of Statistics for a Statistics and Data Science Seminar Series during term time, where internal and external speakers present their latest research. Over the summer, it also hosted a Multi-Agent Deep Reinforcement Learning Study Group, led by PhD Affiliate Francisco Aristi-Reina from the Department of Mathematics, offering students the opportunity to discuss advanced Al techniques.

Other internal research and teaching collaborations this year have included: an AI and Education conference with Peking University co-hosted with the LSE Eden Centre for Education Enhancement; student capstone projects with the Transition Pathway Initiative; a student-led summer project with the Marshall Institute's 100x Impact; and a working partnership with the International Growth Centre (IGC) to appoint and co-host a research officer for its Zambia Evidence Lab (ZEL) initiative.











Al and Education Fellowships

Assistant Professor (Education) at the DSI Dr Jon Cardoso-Silva has been awarded one of 10 inaugural Al and Education Fellowships at LSE. Fellows are funded to step away from their teaching duties for one term and receive tailored resources and support in order to pilot and embed Al in key courses in their departments. Fellowships have been made possible by the generous support of Reid Hoffman, Co-Founder of LinkedIn and Manas Al and a Visiting Senior Fellow at the DSI.

Among those joining Jon as inaugural Al Fellows are DSI Faculty Affiliates Dr Antonio Mele, Associate Professor of Economics (Education) and Undergraduate Programme Director in the Department of Economics; Dr Chris Blunt, Associate Professor (Education) and LSE100 Co-Director; Dr David O'Sullivan, Assistant Professor (Education) in the Department of Mathematics; Dr Dario Krpan, Associate Professor in the Department of Psychological and Behavioural Science; Dr Dorottya Sallai, Associate Professor (Education) in the Department of Management; and Dr Marcos Barreto, Associate Professor (Education) and Department Lead on Al and KEI Strategic Lead in the Department of Statistics.



What I appreciate most about the DSI is its lively mix of disciplines and events that spark fresh ideas. Through DSI's activities, I teamed up with colleagues in Statistics and Political Science and together we have published a paper in a Nature Portfolio journal. We are now launching a new project on how biased Al-generated responses can mislead human decision-making.

As a member of the DSI PhD Affiliate Network organising committee, I am thrilled to help sustain that momentum and to help even more cross-disciplinary collaborations flourish within DSI."

Chuyao Wang

DSI PhD Affiliate and PhD Affiliate Network Committee member PhD student, Department of Methodology

External influence

Data with Purpose Summit

In May, DSI Director Professor Martin Anthony gave a keynote talk at the third edition of the NOVA IMS Data with Purpose Summit. His talk, "The Future of Al and Data Science: some social science perspectives" explored how - in the right hands - Al could augment human capability and serve as a force for good. From streamlining government, to improving access to education and healthcare. Martin outlined a vision where Al, carefully managed, benefits society.

Intelligent Futures: Al and the transformation of society

In June, Dr Jon Cardoso-Silva, Assistant Professor (Education) at the DSI, delivered a two-day masterclass with Dr Dorottya Sallai, Associate Professor (Education) of Management in the Department of Management. Hosted by Fundación Ramón Areces in Madrid, the event brought together professionals working in business, academia, national, regional and local government, and research institutions to explore the rapid rise of Al, machine learning and LLMs such as ChatGPT.

Partnerships and collaboration

The DSI has continued to build on existing relationships with academic institutions, industry, government, and third-sector organisations, and to forge new partnerships. We maintained our DSI Squared collaboration with the Data Science Institute at Imperial, hosting reciprocal research seminars and bringing together science, technology, engineering and mathematics (STEM) and social sciences, humanities and the arts (SHAPE) academics.

We have built close ties with the Institute for Artificial Intelligence at King's College London, co-organising two events: an interdisciplinary workshop exploring the transformative potential of AI in financial systems, and a public event as part of its annual Festival of Artificial Intelligence, examining how AI can help structure climate legislation data to support fair, evidence-based decarbonisation policies.

We sustained our relationship with CIVICA European University of Social Sciences through the CIVICA Data Science Seminar Series and established new European connections with

NOVA University in Lisbon. Partnering with LSE's Eden Centre, we worked with Peking University on a two-day conference at LSE - Global Approaches to Generative AI in Higher Education.

Collaborations with industry and the public sector have continued to support our research and teaching activities. These included a half-day student workshop at the Cabinet Office and co-hosting a research workshop with the International Association for Quantitative Finance for finance experts. Through our stewardship of the School's membership of the Turing University Network, we continue to share opportunities for researchers at LSE to collaborate with colleagues based across the 65-member university network who share an interest in AI and data science. This year we supported the successful application of a master's student to take part in one of the Turing's renowned Data Study Groups.

Visiting appointments

Our growing visiting community has greatly enhanced the data science and Al community at LSE, bringing leaders in the field into conversation with our own academics, researchers and students. Nine visiting appointments have been made this year including Reid Hoffman, Co-Founder of LinkedIn and Manas AI; Professor Mairéad Pratschke, Al Strategist and Advisor in Digital Education; and Professor Nello Cristianini, a leading Al researcher based at the University of Bath. Visitors have spoken at events, contributed to blogs, met with students and helped to raise the profile of the Institute nationally and internationally.









Research

The DSI supports and promotes research by Institute staff, visiting scholars and DSI Faculty and PhD Affiliates that examines the societal impacts of data and AI, leverages emerging technologies to enhance research methodologies, and contributes to the development and refinement of AI capabilities.

This research takes place in academic departments and research centres across the School and is carried out by a wide range of individuals from students and early career researchers to globally recognised subject experts.

The work of researchers affiliated with the DSI has been recognised with many prestigious awards this year including: a European Research Council (ERC) Consolidator Grant awarded to Dr Milena Tsvetkova from the Department of Methodology for her HUMANET project

(a research lab studying human-machine social systems); a British Academy Talent Development Award 2024-25 for Dr Marcos Barreto from the Department of Statistics for his project rethinking programming education in the age of AI; and the Philip Leverhulme Prize awarded to Professor Michael Muthukrishna from the Department of Psychological and Behavioural Science which he said will "help drive a new direction of research on how AI is participating in the cultural evolutionary process, shaping our culture and cognition."

A core part of our mission is to convene and enable interdisciplinary research across the School, helping embed data science approaches within LSE's social science disciplines. This year, with the Research and Innovation Division. the DSI leadership team co-hosted a Community Lab to identify new opportunities for cross-departmental collaboration



Al has the power to revolutionise social science – through new data, methods and scale - but it is precisely within our discipline that we must lead the examination of Al's societal implications and ensure that innovation proceeds with responsibility."

Professor Susana Mourato

Professor of Environmental Economics; Vice President and Pro-Vice Chancellor (Research), Department of Geography and Environment.

Research highlights

DIVIDED: preventing the polarising effects of economic inequality

Dr Miriam Sorace, DSI Visiting Senior Fellow and Associate Professor in Comparative Politics. University of Reading.

In 2024. Dr Miriam Sorace was awarded a Future Leadership Fellowship from the government's UK Research and Innovation (UKRI) funding body for her DIVIDED research project. DSI is a partner on the project and will host one postdoc and one PhD candidate from the DIVIDED team over two consecutive years to support her research. DIVIDED's core vision is to strengthen our democratic system's defences against rising economic inequality. Using advanced research methodologies and a combination of political science and social psychology, DIVIDED explores how people form opinions and attitudes in their social and environmental contexts. The project aims to investigate the social mechanisms underlying rising economic inequality and increasing levels of political polarisation; develop ways to reduce partisan influence on individuals; and test new deliberative democracy designs which can weaken political polarisation, even in highly politicised, inequality-ridden contexts.

GENIAL: GENerative AI tools as a catalyst for learning

Dr Marcos Barreto, Department of Statistics; Dr Jon Cardoso-Silva, DSI; Dr Casey Kearney, School of Public Policy and Dr Dorottya Sallai, Department of Management.

Without adequate support or direction, the growing reliance of students on GenAl tools for learning and assessment risks circumventing rather than enhancing the learning process. When the GENIAL project began in June 2023, it was conceived as a small focus group initiative to evaluate the efficacy of code generation tools. However, as interest has grown in the field and the use of GenAl tools has dramatically increased among students, GENIAL has evolved into a multidisciplinary research project and continues to create impact across the School and beyond.

This year, members of the GENIAL team have been invited to speak at several national and international events about their initial findings. They also published a paper in the LSE Public Policy Review – "Approach generative Al tools proactively or risk bypassing the learning process in higher education" - in which they argue that students

use GenAl differently for learning than they do for assessments. Following the launch of LSE's institutional partnership with Anthropic, the GENIAL team is now working with Anthropic on new evaluation studies based on Claude for Education, a chatbot designed to support students and teachers.

Zambia Evidence Lab

Toby Edison, Data Engineer at Zambia Evidence Lab (ZEL), International Growth Centre (IGC) and Data Science Institute.

The ZEL is a Ministry of Finance and National Planning initiative, supported by the IGC at LSE. Embedded within the Zambian government, ZEL supports government ministries with the tools, capacity and systems to help identify new data and make better use of the data already collected. All lab outputs are demand-led, co-produced with policymakers, and designed to address pressing policy questions. The lab aims to help shift Zambia's public sector towards sustained, data-informed decision-making. The DSI worked with the IGC to appoint Toby Edison, the data engineer for the ZEL, who is partly based at the DSI.

(De)Constructing health and wellbeing through data

Dr Alexandra Gomes, LSE Cities.

This collaborative research project supported by the Ordnance Survey (OS) as part of the Public Sector Geospatial Agreement in partnership with NHS England – explores the complex and intricate relationship between the physical environment and health and wellbeing. Now in its final year, the team is preparing its first academic paper and working with OS to explore how the project outputs can influence policymakers and help OS guide data creation strategies and prioritisation.

The research team has taken part in two workshops that brought together policymakers, academics and third-sector experts to explore the challenges of working with complex socio-spatial data.

The project also featured prominently at this year's LSE Festival, where lead researcher Dr Alexandra Gomes contributed to the Festival exhibition. and a "speed research" event where she met with UK councillors for 15-minute knowledge exchange sessions. The project will be showcased at Evidence Week in Parliament – an annual event bringing the public, researchers and parliamentarians together to discuss how evidence is used and scrutinised at Westminster - in November 2025.

highlighting its potential to shape national conversations on data, space and public health.

HUMANET: human-machine social systems

Dr Milena Tsvetkova, Department of Methodology.

Intelligent machines such as algorithms, bots and robots have permeated the social world, becoming social actors on par with humans. HUMANET brings together an interdisciplinary team of postdocs and external collaborators to investigate how human-machine, machine-machine, and human-human interactions differ, and how they affect collective outcomes in hybrid networks and communities

Led by project director Milena Tsvetkova, the research combines theories from social psychology, network sociology, human-computer interaction and Al. It employs large-scale online experiments, network analysis, data mining and agentbased modelling. The project received funding this year from the European Research Council for the period 2025 to 2030.

Capacity building on generative Al tools for programming education Dr Marcos Barreto, Department of Statistics.

The objectives of this project are to research new pedagogical approaches to programming education and to build a community of practice around the use of GenAl to programming education in data science courses. This year, Marcos has been examining mixed pedagogical approaches combining student- and instructor-led activities with Al-assisted ones. He is also liaising with LSE colleagues and the Eden Centre to design and share teaching materials and promote events, such as bite-sized sessions and public lectures with internal and external speakers scheduled for the next academic year.

ChatLSE

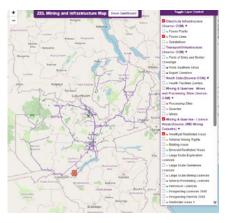
Dr Jon Cardoso-Silva, DSI; Yan (Terry) Zhou, undergraduate student, BSc Politics and Data Science: Aksh Sabherwal, undergraduate student, BSc Economics; Kristina Dixon, undergraduate student, BSc Economics: Alexey Burmistrov, undergraduate student, BSc Economics: Kylin Gao, undergraduate student. LSE General Course.

In the summer of 2024, the DSI academic team brought together a group of undergraduate students from the DS105 (Data for Data Science) module and developed ChatLSE - a prototype chatbot designed to interact with LSE-specific documents. The tool has strong potential to support staff and students by providing guick, conversational access to institutional information. While still in development, ChatLSE has already sparked interest across the School. The team is currently in discussion with the Academic Registrar's Division and DTS to explore how the tool could be further developed and integrated into LSE systems.

100x Data Lab

Dr Barry Ledeatte, Guest Teacher, DSI; Defne Yavuz, undergraduate student, BSc Psychological and Behavioural Science; Urvi Gaur, undergraduate student. BSc Economics.

The student-led research project aims to develop data-driven processes to improve the internal analytics used by 100x Impact. By gathering insights from an array of web data, the research builds on the skills students have developed on the DSI's newly launched DS205: Advanced Data Manipulation programme. The 100x Data Lab is the first collaboration between 100x Impact, based at the Marshall Institute and the DSI. It was initiated by Dr Jon Cardoso-Silva, DSI, and Professor Kieron Boyle, Marshall Institute for Philanthropy and Social Entrepreneurship. 100x Impact is a global impact initiative backing the next generation of social unicorns – not billion-dollar companies but organisations whose models can positively impact a billion lives.





Selected publications

Throughout this year, DSI Faculty and PhD Affiliates have published a diverse range of articles in research publications. We list a selection here.

"Deep learning with missing data"

Professor Tengyao Wang. Professor and MSc Statistics (Financial Statistics) Programme Director, Department of Statistics (co-author). Preprint, 2025.

This paper presents Pattern Embedded Neural Networks (PENNs), a deep learning method for predicting outcomes with missing data. By combining imputed values and missingness patterns, PENNs improve accuracy. Theoretical analysis and experiments show PENNs outperform standard models across various datasets and imputation methods, including under complex missingness scenarios.

"A new sociology of humans and machines"

Dr Milena Tsvetkova, Associate **Professor of Computational Social** Science, Department of Methodology (co-author). Nature Human Behaviour, 8, pp.1864-1876, 2024.

This paper proposes a new sociology of human-machine systems, emphasising how humans and intelligent machines interact in complex social settings. It reviews dynamics like competition, cooperation and contagion, showing that machines influence collective outcomes in unique ways. The authors call for interdisciplinary research, thoughtful design, and adaptive policy.

"An information-theoretic asset pricing model"

Dr Christian Julliard, Associate Professor of Finance, Department of Finance (co-author) Journal of Financial Econometrics, 23 (1), 2025.

The paper offers a new way to understand how financial markets price risk. Using a method based on information theory, the researchers created a model - called the Information Stochastic Discount Factor – that better explains asset prices than traditional models. This offers a powerful tool for evaluating investment strategies and economic theories, helping investors and policymakers better understand the forces that drive market returns.

"Automated public decision making and the need for regulation"

Professor Andrew Murray, Professor of Law, LSE Law School LSE Public Policy Review, 4 November 2024.

Murray critiques the UK's use of automated decision-making in public services, citing risks of bias and injustice. He urges the creation of a regulatory framework with transparency, oversight and appeal rights, aligning with EU standards. Without safeguards, such tools may erode public trust and harm vulnerable individuals

"Al policymaking as drama"

Dr Alison Powell, Associate Professor, Department of Media and Communications (co-author) Journal of Digital Social Research, 6 (4), pp.77-91, 2025.

This paper critiques AI policymaking as a theatrical performance, where academics play scripted roles in staged consultations. The authors argue that past injustices and policy failures haunt current debates, urging scholars to embrace ambivalence and challenge dominant narratives to foster more inclusive, reflective and just Al governance.

"Beyond WEIRD: can synthetic survey participants substitute for humans in global policy research?"

Dr Dario Krpan, Associate Professor, Department of Psychological and Behavioural Science (co-author) Behavioral Science & Policy, 10(2), pp.26-45, 2024.

This study finds that GPT-4-generated synthetic participants can approximate human responses in policy surveys, with particularly strong alignment in the United States and promising results in non-WEIRD (western, educated, industrialised, rich and democratic) countries. Compared to human responses, synthetic responses often reflect slightly more progressive and financially literate perspectives. Overall, the findings suggest that synthetic participants can be an asset for early-stage policy research, offering scalable and efficient insights, but human participants remain essential for validating findings and capturing more nuanced perspectives.

"The influence of mental state attributions on trust in large language models"

Professor Jonathan Birch, Department of Philosophy Logic and Scientific Method (co-author) Communications Psychology, 3(1), 2025.

This paper demonstrates that people trust AI more when they perceive it as intelligent, but not when they see it as conscious or emotional. Attributing intelligence to ChatGPT increased advice-taking, while attributing experience-related traits reduced it. Consciousness attributions had no positive effect on trust, highlighting nuanced user perceptions of Al.

"Random Fourier signature features"

Professor Zoltán Szabó, Professor of Data Science and MSc Data Science Programme Director, Department of Statistics (co-author). SIAM Journal on Mathematics of Data Science, 7(1), pp.329-354, 2025.

In this paper various accelerated methods are presented leveraging random Fourier features and tensor. projections to approximate the computation of the signature kernel, one of the most powerful similarity measures on sequential data. The

techniques are accompanied with uniform approximation guarantees and GPU-accelerated implementation enabling one to handle large datasets up to a million-time series

"Using large language models to analyse political texts through natural language understanding"

Professor Ken Benoit, Singapore Management University; Professor Scott de Marchi, Duke University; Dr Conor Laver, Roux Institute, Northeastern University: Professor Michael Laver, New York University and LSE Data Science Institute; Jinshuai Ma, LSE Data Science Institute. American Journal of Political Science. Preprint, 2025.

The paper introduces a scalable method for interpreting political texts using LLMs and natural language understanding. The study highlights the transformative potential of LLMs for political text analysis, offering a replicable and theoretically grounded alternative to conventional methods



Education

At the DSI, our teaching is grounded in the belief that data-driven approaches are essential to rigorous social science research. Our courses equip students across the School with skills, tools and critical insights to engage with data in meaningful, responsible and impactful ways, so that they can apply data science techniques and insight to their field of study.

As well as confidently harnessing the power of data in academic work, we want our students to develop a critical understanding of the evolving digital world, enabling them to interrogate the ethical, political, and social dimensions of emerging technologies. The DSI continues to take a leading role in embedding AI in education across the School and beyond, with our modules among the first to embrace GenAl as a tool to enhance learning. This year, alongside our ongoing GENIAL research project assessing the effectiveness of these tools in education. the academic team has provided guidance on the launch of Anthropic's Claude for Education across LSE, and collaborated with the Eden Centre on policies and guidance for AI in education. Assistant Professor (Education) Dr Jon Cardoso-Silva has represented the DSI in two School-wide forums on Al in education: the Departmental Al Lead group and the Deputy Heads of Department (Education) group. Through these efforts, the DSI is helping to shape the School's approach to AI as one that is both informed and forward-looking.

Undergraduate teaching

During the 2024/25 academic year, four undergraduate courses were delivered across six cohorts during the autumn and winter terms. As well as our introductory modules designed to engage students with no prior experience in data science, this year we launched a new undergraduate course, DS205: Advanced Data Manipulation. Developed in collaboration with the Transition Pathway Initiative Centre (TPI), our first cohort of 23 students used real-world climate finance data to learn advanced data engineering skills and modern data manipulation techniques. This included building application programming interfaces and retrieval-augmented generation systems tailored to meet the specific needs of the TPI. This partnership has created a unique learning experience for students where theory meets practice in sustainability research.

With a strong emphasis on the social science applications of data science, our courses champion data-driven

approaches to real-world social. economic and political issues. Growing enrolment in our undergraduate data science courses, which now serve over 300 students, reflects the increasing recognition of these skills across academic disciplines.

Henry Wynn prize

This year, the DSI established a new student prize in memory of Professor Henry Wynn, a DSI Faculty Affiliate and professor in the Department of Statistics for over 20 years. The prize, to be awarded annually, recognises not only academic excellence but also the application of domain expertise to data science and contributions to the wider data science community at LSE. The 2025 joint winners were Vignesh Narayanan, a BSc Economics student who took our DS105 and DS202 modules, and Doris Yunyan Huang, a BSc Sociology student who took our DS105 module.

PhD research

The DSI has become a valuable hub for LSE PhD students working at the intersection of data science and the social sciences across LSE. We offer a growing range of opportunities, including our newly established PhD Affiliate Network and visiting researcher placements. These support and connect doctoral researchers as they apply data science to real-world social challenges. We also continue to host two PhD candidates at the DSI. Vincent Chung whose research centres on the exploration of virtual reality, and Wendy Wang whose research explores the sources of data and the corresponding methodologies for social science studies.

Extended education

Executive education

In addition to online training programmes in data science and AI and twice-yearly in-person Data Science and Al for Executives programme, the DSI has developed a new online AI Leadership Career Accelerator programme in collaboration with the Department of Management. Designed for mid- to senior-level leaders, the six-month programme gives professionals the skills to assess AI opportunities, build boardready business cases, and confidently lead AI strategy, without needing a technical background.

LSE Summer School

DSI Academics and Faculty Affiliates delivered three courses as part of the LSE Summer School that introduce UK and international students to data science and Al. These are: "The Ethics of Data and Artificial Intelligence". "Data Engineering for the Social World", and "Introduction to Data Science and Machine Learning".

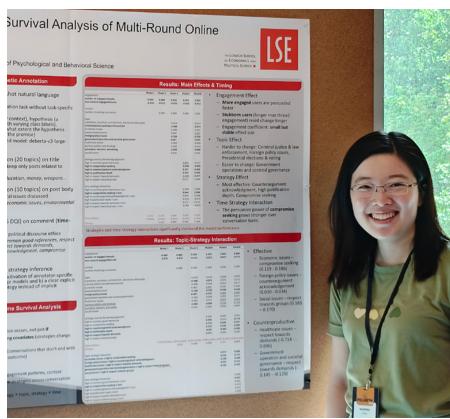


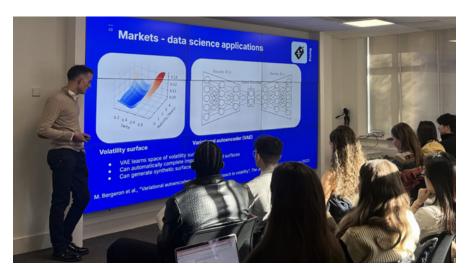
I studied DS202A and DS205 as my outside options during my BSc in Economics. These were two of the most practical and valuable modules I had the opportunity to study at LSE. Several things set DSI and its courses apart, but the most significant is their exceptional faculty. The professors, class teachers and support staff were consistently supportive, encouraging, and deeply engaged with the courses. I genuinely believe that the professors at DSI are among the most passionate educators I have had the privilege of learning from. Additionally, another great aspect of these modules was their strong connection to the current state of AI and data science. We were consistently encouraged to engage with the latest resources and tools, using them thoughtfully and effectively within an academic framework. Specifically, through the DS205 module, I acquired valuable skills that enabled me to work as a research assistant at LSE."

Urvi Gaur, Undergraduate student, BSc Economics









0



Engagement

The DSI has continued to platform leading voices from academia, industry, and policy through a vibrant events programme and by amplifying the voices of our community across our digital platforms. Through our growing online presence, the DSI is driving forward conversations that matter, connecting innovative research with real-world challenges and opportunities.

Events

The DSI events programme is a cornerstone of our strategy to convene, catalyse and communicate LSE's worldleading activity in data science and Al.

Throughout this academic year we have continued to bring together leading experts to speak in a wide range of events - spanning public lectures. research seminars and student activities - to inspire our community.

DSI events have featured world-class research and opinion to help drive an informed public conversation around key topics at the intersection of AI, data science and the social sciences. We have hosted or co-hosted 14 public lectures discussing diverse themes, from the impact of AI on the workplace. the future of research, environmental policy, and education. Events have explored the many dimensions of Al, bringing together a wide range of perspectives, from bold, optimistic visions of Al's potential to critical

reflections on the way new technologies are being developed.

The LSE Festival 2025, themed "Visions for the Future," explored how Al, new technologies, and innovation are reshaping our societies. The festival demonstrated a School-wide commitment to highlighting the centrality of social sciences in the debate around and development of our rapidly evolving digital world. The DSI contributed to the festival through a fireside chat, two panel discussions, and a research presentation featured in the festival exhibition. DSI also delivered a family event to equip children and young people with the skills to explore AI and ChatGPT creatively - through learning, art, and music.

This year our research events have gathered interdisciplinary groups of early career and established researchers to share findings peer-topeer. We have also brought together

academics and practitioners to understand how they can work together towards better outcomes.

Through career talks and industry visits we have introduced our students to a range of different real-world applications of their data science studies to help them plan their progression into the world of work.



Event highlights

Visions for the future with Lila Ibrahim

LSE Festival public event

Lila Ibrahim, Chief Operating Officer of Google DeepMind, joined Cosmina Dorobantu. DSI Professor in Practice and Senior Adviser, to discuss her career journey from engineering to Al leadership. They explored the importance of collaboration between technologists and social scientists to ensure Al development is inclusive, equitable and aligned with human values; the positive impact that AI is already having for scientific and social good; and the how essential it is to have equitable access to Al tools and education.

Explore AI adventures with ChatGPT for learning, art and music

LSE Festival family day event

DSI Affiliate Professor Michael Muthukrishna, Professor of Economic Psychology, Department of Psychological and Behavioural Science, facilitated an interactive workshop designed for young people to play, learn, and discover how Al is shaping the future of education. Through hands-on activities with ChatGPT and other AI tools, participants explored creative applications of AI in learning, art, and music.

Careers in data science

Student event

This regular series helps students to plan their careers in data science or related fields by inviting professionals to speak about their career paths from graduation to data science jobs. This year the series heard from a range of voices, from recent LSE graduates to experienced analysts. Speakers included: Dr James Hamp, DSI Visiting Fellow and Head of FX Data Strategy and Analytics at Citi, who demystified industrial jargon, and Tabtim Duenger and Riva Chhikara, Data Scientists at The Economist, who discussed their experiences securing their first roles and negotiating responsibilities within the media sector

Genesis: artificial intelligence, hope and the human spirit

Public event

Craig Mundie, former Chief Research and Strategy Officer at Microsoft, was in conversation with Professor Mairéad Pratschke, Visiting Professor, Data Science Institute, LSE and AI Strategist and Advisor in Digital Education. They discussed Genesis, the new book coauthored by Criag with Henry Kissinger and Eric Schmidt. The book attempts

to answer some of the unprecedented challenges posed by AI which are of an intensity and scale that we have never seen before.

Al and finance collaborative frontiers

Research event

Hosted in collaboration with King's College London's Institute for Artificial Intelligence, this interdisciplinary workshop explored the transformative potential of AI in financial systems. It offered an open forum for researchers from different institutions, practitioners, and policymakers to exchange knowledge about pioneering Al applications in finance and discuss emerging technological and ethical challenges.

Communications

Through our website, social media, newsletters and via external channels. the DSI continues to share news about the work of DSI researchers and Faculty and PhD Affiliates from across the School with a broad range of audiences - both within and beyond academia and policy circles.

We promote opportunities for study and share information about events that investigate all aspects of data science, Al, and machine learning. Our social media following continues to grow, with increasing engagement in our content. We now have over 7.500 LinkedIn followers (over double that of a year ago) with engagement increasing threefold. On YouTube, we have more than 600 subscribers and on X. over 5.500 followers.

The DSI website has been significantly redeveloped. It now hosts information on Al-related research, education, partnerships, events, and blogs both developed and delivered by the Institute and by teams from across the School. It showcases an LSE-wide "AI, Technology and Society" series of research films exploring how rapid advancements in technology will affect our changing world. It also hosts a rich and extensive resource offering advice on the use of Al in research.













Selected blogs

Throughout the year LSE's blogs have published about the ramifications of the changing world of data and Al. Many have been written or co-written by DSI Faculty Affiliates, core and visiting staff. Here is a selection:

"How is generative AI changing social science?"

Dr Thomas Robinson, DSI Faculty Affiliate and Assistant Professor. Department of Methodology. LSE Impact Blog, 20 September 2024.

Drawing on discussions from a recent workshop hosted by the Department of Methodology at LSE, in this blog Thomas Robinson highlights three ways in which AI is reshaping research across the social sciences and how it raises questions around the reflexivity of social science outputs in a world where AI is increasingly mainstream.

"To combat misinformation effectively, people must see it is a problem and trust sources countering it"

Dr Jens Koed Madsen, DSI Faculty Affiliate and Assistant Professor. Department of Psychological and Behavioural Science. USAPP

United States Politics and Policy, 23 September 2024.

Misinformation is a growing global problem, with false rumours having the potential to affect the course of elections or lead to violence. In new research Jens Koed Madsen looks at how we can 'inoculate' against misinformation by teaching people about how it can be created and spread. He finds that for these techniques to be effective, people must believe that misinformation affects them and they must trust sources countering it.

"Al can carry out qualitative research at unprecedented scale"

Dr Friedrich Geiecke, DSI Faculty Affiliate and Assistant Professor of Computational Social Science, Department of Methodology and Professor Xavier Jaravel, DSI Faculty Affiliate and Professor of Economics. Department of Economics. LSE Impact Blog, 30 October 2024.

The interactional skill of LLMs enables them to carry out qualitative research interviews at speed and scale. Demonstrating the ability of these new techniques in a range of qualitative enquiries, Friedrich Geiecke and Xavier Jaravel present a new open-source platform to support this new form of qualitative research.

"Ethnic wealth inequality in England: surprising shifts from 1858 to today"

Professor Neil Cummins, DSI Faculty Affiliate and Professor of Economic History, Department of Economic History. LSE Inequalities Blog, 22 January 2025.

What is the historical relationship between wealth and ethnic background in the UK? Until now, there has been little empirical work in this area. In this blog, by matching surnames to likely ethnic groups, Neil Cummins uncovers five surprising facts about the evolution of ethnic wealth inequalities over time.

"The global pursuit of sovereign Al is becoming the 21st century's arms race"

Professor Mairéad Pratschke, Visiting Professor, DSI, LSE and AI Strategist and Advisor in Digital Education. LSE Business Review, 27 January 2025.

Technology executives now have a direct line to government leaders and are writing policy and influencing key decisions around AI development that will shape the future of global politics,

diplomacy, security and competition. In this blog. Mairéad Pratschke discusses these and other developments in light of a new book by Henry Kissinger, Craig Mundie and Fric Schmidt

"Al will be good for diagnostics, but not for educating kids"

Professor Judy Wajcman, DSI Faculty Affiliate and Emeriti, Department of Sociology LSE, and Sophie Mallett, LSE Communications Division. LSE Business Review. 12 March 2025.

Judy Wajcman has spent her career studying the effects of technological change on society and work. She thinks Al will improve our lives in many ways, but there are limits to what it can do. In this Q&A with Sophie Mallet, she talked about everything from universal basic income to the use of AI in diagnostics. education and care work

"Should we introduce a new right against Al replicas?"

Dr Luke McDonagh (co-author) DSI Faculty Affiliate and Associate Professor of Law, LSE Law School. LSE British Politics and Policy Blog, 13 March 2025.

There is an increasing concern among artists about the impact of new AI technologies. One of those worries is Al's ability to create digital replicas of people's voices and images. Luke McDonagh, Emma Perot and Luis Porangaba ask whether it's time the UK introduced a new right to protect against that.

"DeepSeek, ChatGPT and the race towards artificial general intelligence"

Dr Barry Ledeatte, DSI Guest Teacher. LSE Business Review. 14 March 2025.

Whole enterprises and nations are framing their ambitions around artificial general intelligence (AGI), for which reasoning is considered a milestone. In this blog Barry Ledeatte writes that because of the emergence of DeepSeek, AI research has reached a level of competition that will probably accelerate progress at the cost of concerns around safety.

"Generative AI in education: reshaping the future of learning"

Dr Dorottya Sallai, DSI Faculty Affiliate and Associate Professor (Education) Department of Management; Dr Jon Cardoso-Silva, Assistant Professor (Education), DSI; Dr Marcos Barreto, DSI Faculty Affiliate and Assistant Professor (Education) Department of Statistics and Dr Casey Kearney, DSI Faculty Affiliate and Assistant Professor (Education), School of Public Policy.

Department of Management Blog, 6 May 2025.

As universities integrate GenAl tools to support students' learning and better prepare them for the requirements of tomorrow's labour market, this blog explores how students use these technologies and how such use impacts their skill development.

"Data centres are the factories of our modern lives"

Dr Eugenie Dugoua, DSI Faculty Affiliate and Assistant Professor of Environmental Economics. Department of Geography and Environment, and Anna Bevan, LSE Communications Division. LSE Business Review, 21 May 2025.

Our lives today increasingly depend on data centres for simple activities like writing emails or watching videos. The arrival of LLMs such as ChatGPT has caused a significant uptick in the use of digital services that also depend on data centres. Eugenie Dugoua discusses what this dependence means for the environment in a O&A with Anna Bevan.

The DSI community

Senior academic team

Professor Martin Anthony

Director, Data Science Institute

Professor Cosmina Dorobantu

Senior Adviser and Professor in Practice, Data Science Institute

Professor Helen Margetts OBE FBA

Senior Adviser and Visiting Professor, Data Science Institute

Professor Johannes Ruf

Deputy Director, Data Science Institute

Teaching and research

Dr Ghita Berrada

Assistant Professor (Education), Data Science Institute

Dr Jon Cardoso-Silva

Assistant Professor (Education), Data Science Institute

Toby Edison

Data Engineer at Zambia Evidence Lab. International Growth Centre and Data Science Institute

Sara Luxmoore

Research Officer, Data Science Institute

Jinshuai Ma

Research Officer in Data Science. Data Science Institute

Professor Zoltán Szabó

Turing University Network Liaison (Academic), Data Science Institute; Professor of Data Science, Department of Statistics

Professional services staff

Jill Beattie

Institute Manager, Data Science Institute

Emily Cruz

Communications and Events Manager, Data Science Institute

Ali Eggleton

Institute Administrator, Data Science Institute

Ellie Finlay

Events Officer, Data Science Institute

Lou Flandrin

Business Development Manager, Data Science Institute and PAGE

Carmen Grav

Executive Assistant to the Senior Academic Team, Data Science Institute

Kevin Kittoe

Teaching and Assessment Administrator, Data Science Institute

Johanna Tate

Communications and Events Manager, Data Science Institute

Guest teachers

Dr Stuart Bramwell

Guest Teacher, Data Science Institute

Riya Chhikara

Guest Teacher, Data Science Institute; Data Scientist. The Economist

Tabtim Duenger

Guest Teacher, Data Science Institute: Senior Data Scientist. The Economist

Yassine Lahna

Guest Teacher, Data Science Institute

Dr Barry Ledeatte

Guest Teacher, Data Science Institute

Alexander Soldatkin

Guest Teacher, Data Science Institute: DPhil Candidate, University of Oxford; Director of Studies. Circle Institute

Andreas Stöffelbauer

Guest Teacher, Data Science Institute; Data Scientist, Microsoft

PhD students

Vincent Chuna

PhD Candidate in Geography, Data Science Institute: LSE Data Science PhD Studentship

Wendy Wang

PhD Candidate in Social Research Methods. Data Science Institute

DSI Faculty Affiliates

Dr Audrey Alejandro

Associate Professor, Department of Methodology

Dr Migdad Asaria

Assistant Professor, Department of Health Policy

Dr Galit Ashkenazi-Golan

Assistant Professor, Department of Mathematics

Dr Mona Azadkia

Assistant Professor, Department of Statistics

Dr Marcos Barreto

Associate Professor (Education) and KEI Strategic Lead Assistant Professorial Lecturer, Department of Statistics

Professor Pauline Barrieu

Professor and Head of Department, Department of Statistics; Vice-Chair of Academic Board, LSE

Dr Tuğkan Batu

Assistant Professor, Department of Mathematics

Professor Charlie Beckett

Professor of Practice. Director of Polis and the Polis/LSE Journalism Al Project, Department of Media and Communications

Dr Liam Beiser-McGrath

Associate Professor, Department of Social Policy

Professor Wicher Bergsma

Professor, Department of Statistics

Professor Tim Besley

School Professor of Economics and Political Science, Department of **Economics**

Professor Jonathan Birch

Professor, Department of Philosophy, Logic and Scientific Method

Dr Chris Blunt

Associate Professor (Education) and Co-Director, LSE100

Professor Umut Cetin

Professor, Department of Statistics

Dr Yining Chen

Associate Professor, Department of Statistics

Dr Yunxiao Chen

Associate Professor, Department of Statistics

Dr Alexandra Cirone

Assistant Professor, School of Public Policy

Dr Antonio Cordella

Associate Professor of Management, Department of Management

Professor Riccardo Crescenzi

Professor of Economic Geography and Deputy Head of Department (Research), Department of Geography and Environment

Professor Neil Cummins

Professor, Department of Economic History

Dr Christoph Czichowsky

Associate Professor, Department of Mathematics

Dr Daniel De Kadt

Assistant Professor, Department of Methodology

Dr Zachary Dickson

LSE Fellow in Quantitative Methodology, Department of Methodology

Dr Eugenie Dugoua

Assistant Professor of Environmental Economics, Department of Geography and Environment

Dr Marion Dumas

Assistant Professorial Research Fellow. Grantham Research Institute

Professor Alexander Evans

Associate Dean (Strategic Development) and Programme Director, MPA in Data Science for Public Policy, School of Public Policy

Dr Shereen Fernandez

LSE Fellow, LSE100

DSI Faculty Affiliates cont'd

Dr Giulia Ferrari

Research Fellow, LSE Health

Dr Florian Foos

Associate Professor in Political Behaviour, Department of Government

Dr Carrie Friese

Associate Professor, Department of Sociology

Dr Seeta Peña Gangadharan

Associate Professor, Deputy Head of Department (Research), Department of Media and Communications

Professor Luis Garicano

Professor of Public Policy, School of Public Policy

Dr Friedrich Geiecke

Assistant Professor of Computational Social Science, Department of Methodology

Dr Sara Geneletti

Associate Professor and MSc Data Science Programme Director, Department of Statistics

Dr Sakshi Ghai

Assistant Professor in Psychological and Behavioural Science, Department of Psychological and Behavioural Science

Professor Fernand Gobet

Professorial Research Fellow.

Department of Philosophy, Logic and Scientific Method

Dr Alexandra Gomes

Research Fellow, LSE Cities

Dr Anushri Gupta

Research Officer, Department of Management

Dr Yuanmo He

LSE Fellow, Department of Methodology

Dr Ryan Hübert

Associate Professor, Department of Methodology

Dr David Itkin

Assistant Professor, Department of Statistics

Professor Xavier Jaravel

Professor, Department of Economics

Dr Christian Julliard

Associate Professor of Finance, Department of Finance

Dr Kostas Kalogeropoulos

Associate Professor and MSc Statistics Programme Director, Department of Statistics

Dr Tomislav Karačić

Assistant Professor of Information Systems, Department of Management

Dr leva Kazlauskaitė

Assistant Professor, Department of Statistics

Dr Casey Kearney

Assistant Professor (Education), School of Public Policy

Professor Tom Kirchmaier

Director of Policing and Crime research group, Centre for Economic Performance

Professor Astrid Krenz

Miguel Dols Fellow, Department of Geography and Environment

Dr Dario Krpan

Associate Professor, Department of Psychological and Behavioural Science

Dr Jonathan Leape

Associate Professor and IGC Executive Director, Department of Economics

Dr Linda Li

LSE Fellow, Department of Methodology

Professor Sonia Livingstone

Professor of Social Psychology, Department of Media and Communications

Dr Joshua Loftus

Assistant Professor, Department of Statistics

Dr Jens Koed Madsen

Assistant Professor, Department of Psychological and Behavioural Science

Dr Lee Mager

Al Innovation Development, Data and **Technology Services**



Dr Luke McDonagh

Associate Professor of Law. LSE Law School

Dr Antonio Mele

Associate Professor of Economics (Education) and Undergraduate Programme Director, Department of **Economics**

Dr Blake Miller

Assistant Professor, Department of Methodology

Andrew Moles

Learning Developer, Data Science Tools, Digital Skills Lab

Professor Irini Moustaki

Professor and Deputy Head of Department (Teaching), Department of Statistics

Dr Carl Müller-Crepon

Assistant Professor, Department of Government

Professor Andrew Murray

Professor of Law, LSE Law School

Professor Michael Muthukrishna

Professor of Economic Psychology, Department of Psychological and Behavioural Science

Dr Neil Olver

Associate Professor, Department of **Mathematics**

Dr David O'Sullivan

Assistant Professor, Department of Mathematics

Dr Katerina Papadaki

Associate Professor, Department of Mathematics

Dr Nils Peters

LSE Fellow in Economic Sociology, Department of Sociology

Dr Jean-Christophe Plantin

Associate Professor, Department of Media and Communications

Dr Mathias Poertner

Associate Professor in Political Science, Department of Government

Dr Alison Powell

Associate Professor, Department of Media and Communications

Dr Eleanor Power

Associate Professor, Department of Methodology

Dr Xinghao Qiao

Associate Professor, Department of Statistics

Professor Ronny Razin

Professor of Economics and Head of Department, Department of Economics

Dr Thomas Robinson

Assistant Professor, Department of Methodology

Dr Kaveh Salehzadeh-Nobari

Postdoctoral Researcher in Data Science. The Inclusion Initiative

Dr Dorottya Sallai

Associate Professor (Education) of Management, Department of Management

Dr Melissa Sands

Assistant Professor of Politics and Data Science, Department of Government

Dr Aurelien Saussay

Assistant Professorial Research Fellow. Grantham Research Institute

Dr Anuschka Schmitt

Assistant Professor of Information Systems, Department of Management

Dr Chengchun Shi

Associate Professor, Department of Statistics

Dr Divya Srivastrava

Guest Teacher, Department of Health Policy

Dr Mariya Stoilova

Research Officer, Global Kids Online, Department of Media and Communications

Professor Elizabeth Stokoe

Professor, Department of Psychological and Behavioural Science

DSI Faculty Affiliates cont'd

Professor Patrick Sturgis

Professor of Quantitative Social Science, Department of Methodology

Professor Zoltán Szabó

Professor of Data Science, Department of Statistics

Dr Ben Tappin

Assistant Professor in Psychological and Behavioural Science, Department of Psychological and Behavioural Science

Dr Milena Tsvetkova

Associate Professor of Computational Social Science, Department of Methodology

Dr Ana Varela Varela

Assistant Professor of Geographic Data Science, Department of Geography and **Environment**

Professor Dimitri Vayanos

Professor of Finance, Department of Finance

Dr Will Venters

Associate Professor of Information Systems, Department of Management

Professor Milan Vojnović

Professor, Department of Statistics

Professor Bernhard von Stengel

Professor, Department of Mathematics

Dr Kate Vredenburgh

Associate Professor, Department of Philosophy, Logic and Scientific Method

Professor Judy Wajcman

Emeriti, Department of Sociology

Professor James Walters

Professor in Practice. Department of International Relations and Director. LSE Faith Centre

Professor Tengyao Wang

Professor and MSc Statistics (Financial Statistics) Programme Director, Department of Statistics

Professor Edgar Whitley

Professor of Information Systems, Department of Management

Wei Xing

Head of Research Computing, Data and Technology Services

Professor Oiwei Yao

Professor, Department of Statistics

Professor Youngin Yoo

Professor of Information Systems and Innovation, Department of Management

PhD Affiliates

*PhD Affiliate Network Committee

Elise Aguzzoli

Department of Health Policy

Francisco Aristi Reina

Department of Mathematics

Dimitrios Athanasiou

Department of Economics

Daniela Baeza Breinbauer

Department of Geography and **Environment**

Arnauld Balner

Department of International History

Roop Bhadury *

Department of Management

Hannah Bunt *

Department of Psychological and Behavioural Science

Alexandra Chesterfield

Department of Psychological and Behavioural Science

Vincent Chung *

Department of Geography and Environment

Marco Cokic

Department of Economic History

Christy Coulson

Department of Methodology

Parashar Das

LSE Law School

Philipp Gagel

Department of Management

Aristeidis Grivokostopoulos

Department of Economic History

Feng Han

Department of Government

Sakina Hansen

Department of Statistics

Isolde Hegemann

Department of Government

Zarja Hude *

LSE Law School

Gaetano Inglese

Department of Government

Ruhi Khan

Department of Media and Communications

Susanne Klausing

Department of Management

Anton Könneke

Department of Government

Charlotte Kuberka

Department of Government

Caroline Leeds-Ruby

LSF Law School

Yang Yang Liu

Department of Economic History

Tao Ma

Department of Statistics

Roberto Rafael Maura Rivero

Department of Economics

Domenico Mergoni

Department of Mathematics

Lennard Metson

Department of Government

Georgia Meyer

Department of Management

Alexander Niederklapfer

Department of Philosophy, Logic and Scientific Method

Sabrina Paiwand

Department of Psychological and Behavioural Science

Pauline Pearcy

Department of Health Policy

Caleb Phillips

Department of Management

Edward Plumb

Department of Mathematics

Elena Pro

European Institute

Sharon Rai

Department of Psychological and Behavioural Science

Shivani Rao *

Department of Media and Communications

Vastav Ratra

Department of Economics

Sarthak Saluja

Department of Health Policy

Moritz Schnorpfeil

Department of Philosophy

Sia Sha

Department of Psychological and Behavioural Science

Haoran Shi

Department of Psychological and Behavioural Science

Mohammad Fadil Sumun

Department of Statistics

Kay-Leigh Sussman

Department of Health Policy

Chuyao Wang *

Department of Methodology

Mac Wang

Department of Methodology

Wanying Wang

Department of Health Policy

Jan Henrik Wasserziehr

Department of Government

Jonas Weinert

Department of Health Policy

Peter Wyckoff

Department of Government

Xinghe Zhu

Department of Statistics

Visiting appointments

Dr Nicole Baerg

Senior Lecturer, Department of Geography, University of Essex Visiting Senior Fellow

Dr Siân Brooke

Assistant Professor, Informatics Institute, University of Amsterdam Visiting Fellow

John Burn-Murdoch

Chief Data Reporter, the Financial Times Visiting Senior Fellow

Dr Gökhan Çiflikli

Founder, Cogentis Visiting Senior Fellow

Dr Raju Chinthalapati

Reader of Financial Technologies, Goldsmith University Visiting Senior Fellow

Professor Nello Cristianini

Professor of Artificial Intelligence, University of Bath Visiting Professor

Dr James Hamp

Director and Head of FX Data Strategy and Analytics, Citi Visiting Fellow

Reid Hoffman

Co-Founder of LinkedIn and Manas Al Visiting Senior Fellow

Dr Ajay Kumar

Associate Professor of Business Analytics, Emlyon Business School Visiting Senior Fellow

Professor Michael Laver

Emeritus Professor of Politics, New York University Visiting Professor

Dr Tom Paskhalis

Assistant Professor, Trinity College Dublin Visiting Fellow

Professor Mairéad Pratschke

Al Strategist and Advisor in Digital Education Visiting Professor

Professor Ehud Shapiro

Professor, Weizmann Institute of Science Visiting Professor

Dr Miriam Sorace

Associate Professor in Comparative Politics, University of Reading Visiting Senior Fellow

Dr Erica Thompson

Associate Professor of Modelling for Decision Making, University College London (UCL) Visiting Senior Fellow

Dr Joshua Townsley

Senior UX Researcher, WhatsApp Visiting Fellow

Professor György Turán

Professor, Mathematics, Statistics and Computer Science, University of Illinois Visiting Professor

Joyce Zeng

Manager and Insurtech Lead, Financial Conduct Authority Visiting Fellow

DSI Governance

Management Committee

Professor Michael Laver

Visiting Professor, Department of Methodology

Professor Susana Mourato

Vice President and Pro-Vice Chancellor for Research (ex-officio)

Professor Andrew Murray

Professor of Law. LSE Law School

Dr Alison Powell

Associate Professor, Department of Media and Communications

Professor Patrick Sturgis

Professor of Quantitative Social Science. Department of Methodology

Professor Zoltán Szabó

Professor of Data Science, Department of Statistics

Professor Bernhard von Stengel

Professor, Department of Mathematics

Advisory Board

Yezdaan Baber

Chief Executive Officer, Belvedere Trading

Professor Ken Benoit

Dean, School of Social Sciences and Professor of Computational Social Science. Singapore Management University

Professor Sir Tim Besley

School Professor of Economics and Political Science and W Arthur Lewis Professor of Development Economics, Department of Economics, LSE

Monisha Kaltenborn

LSE Alumna (LSE Law School)

Dr Mark Thomas Kennedy

Associate Professor, Department of Management and Entrepreneurship, Business School, Imperial College London; Director, Data Science Institute, Imperial College London

Professor Helen Margetts OBE FBA

Professor of Society and the Internet, University of Oxford

Dr Angela Spatharou

Senior Partner and EMEA Leader, Healthcare and Life Sciences, IBM Consulting and Independent Member, LSE Council

Professor Arthur Spirling

Class of 1987 Professor of Politics. Department of Politics and Director of Graduate Studies, Princeton University; President, The Society for Political Methodology

Simone Verri

Partner, Global Financing Group, Goldman Sachs

Chenning Zhao

Chief Strategy Officer, Wiz Holdings Pte. Ltd; ex-Co-Founder and Managing Director, Fountain Invest Partners

Data Science Education Forum

Professor Peter Allen

Professor, Department of Mathematics

Jeni Brown

Head of LSE Digital Skills Lab

Professor Emma McCov

Vice President and Pro-Vice Chancellor for Education (ex-officio)

Dr Antonio Mele

Assistant Professor of Economics (Education), Department of Economics

Professor Irini Moustaki

Professor and Deputy Head of Department, Department of Statistics

Dr Thomas Smith

Associate Professor in Environmental Geography, Department of Geography and Environment

Dr Milena Tsvetkova

Assistant Professor of Computational Social Science, Department of Methodology

Dr Yang Yang

Senior Academic Developer, LSE Eden Centre for Education Enhancement



Appendix | DSI events 2024/25

Public events

Shaping the future: Al in the workplace

Co-hosted with The Inclusion Initiative 30 September 2024

Speakers: Matt Blakemore, CEO, Al Caramba; Adjunct Professor Richard Nesbitt, Chair, The Inclusion Initiative Advisory Board; Carolyn Scott, former director of B2B Marketing at Google; Reshma Shaikh, Head of Al Transformation, Eversheds Sutherland; Noa Srebrnik, CEO and Co-Founder, Citrusx.

Moderator: **Belton Flournoy**, Managing Director, Protiviti UK. Chair: Dr Grace Lordan, Director, The Inclusion Initiative.

Al and the future of behavioural science

Co-hosted with the Department of Psychological and Behavioural Science 8 October 2024

Speakers: Alexandra Chesterfield, Behavioural Risk team lead, NatWest Group; Elisabeth Costa, Managing Director, Behavioural Insights Team; **Professor Oliver Hauser**, Co-Director, Institute for Data Science and Al, University of Exeter; Dr Dario Krpan, Assistant Professor of Behavioural Science, LSE; Professor Susan Michie, Director, Centre for Behaviour Change, UCL; Emeritus Professor Robert West. Advisor, Public Health Wales.

Chair: **Professor Liam Delaney**, Head of the Department of Psychological and Behavioural Science, LSE.

Al in public policy: opportunities and challenges

Co-hosted with the School of Public Policy 5 November 2024

Speakers: **Professor Helen Margetts**, Professor of Society and the Internet, University of Oxford; Professor Andrew Murray, Professor of Law, LSE; Dr Dorottya Sallai, Associate Professor (Education) of Management, Department of Management, LSE; Chloe Smith, former Secretary of State for Work and Pensions and for Science. Innovation and Technology, UK Government.

Chair: Professor Ken Benoit, Professor of Computational Social Science, LSE.

Feeding the machine: the hidden human labour powering Al

Co-hosted with the International Inequalities Institute 4 December 2024

Speakers: Dr Callum Cant, Senior Lecturer, University of Essex; **Dr James Muldoon**, Reader in Management, University of Essex; Professor Kirsten Sehnbruch, Distinguished Policy Fellow and Acting Director, International Inequalities Institute, LSE.

Chair: Dr Kate Vredenburgh, Assistant Professor, Department of Philosophy, Logic and Scientific Method, LSE.

The art of uncertainty: living with chance, ignorance, risk and luck

Co-hosted with the Department of Statistics 22 January 2025

Speaker: Professor Sir David Spiegelhalter, Emeritus Professor of Statistics, University of Cambridge.

Chair: **Professor Tengyao Wang**, Professor and MSc Statistics Programme Director, Department of Statistics, LSE.

Genesis: artificial intelligence, hope and the human spirit

30 January 2025

Speakers: Craig Mundie, President of Mundie & Associates; Professor Mairéad Pratschke, Visiting Professor, Data Science Institute, LSE and Al Strategist and Advisor in Digital Education.

Chair: **Professor Martin Anthony**, Director, Data Science Institute, LSE.

The future of Al

27 March 2025

Speaker: **Emeritus Professor Gary Marcus**, Emeritus Professor of Psychology and Neural Science, New York University and Founder, Geometric.Al.

Chair: **Dr Jon Cardoso-Silva**, Assistant Professor (Education), Data Science Institute, LSE.

The power of data: ethics, politics and public interest

Co-hosted with the Department of Media and Communications 8 May 2025

Speakers: Dr Alison Powell, Associate Professor, Media and Communications, LSE; Dr Chris Wiggins, Chief Data Scientist, New York Times; Dr Erin Young, Head of Innovation and Technology Policy, Institute of Directors.

Chair: **Dr Seeta Peña Gangadharan**, Associate Professor, Department of Media and Communications, LSE.

Superagency: what could possibly go right with our Al future

Co-hosted with the School of Public Policy. 12 May 2025

Speakers: Reid Hoffman, Co-Founder of LinkedIn, Manas Al, and Partner, Greylock Chair: Professor Andrés Velasco, Professor of Public Policy and Dean, School of Public Policy, LSE.

Building the data infrastructure to help us achieve net zero

Co-hosted with King's College London's Institute for Artificial Intelligence 22 May 2025

Speakers: **Dr Michal Nachmany**, Founder and CEO, Climate Policy Radar; **Dr Aurélien Saussay**, Assistant Professorial Research Fellow, Grantham Research Institute, LSE.

Fixing education for the AI age

Co-hosted with the Department of Mathematics 3 June 2025

Speaker: Conrad Wolfram, Co-Founder and CEO, Wolfram.

Chair: **Professor Emma McCoy**, Vice President and Pro-Vice Chancellor for Education, LSE.

Data for development

LSE Festival panel event co-hosted with the International Growth Centre 17 June 2025

Speakers: Natalia Domagala, global digital policy specialist and former Head of Data and AI Ethics, UK Government; Mulele Maketo Mulele. Director of Economic Management Department, Zambia's Ministry of Finance and National Planning; Claire Melamed, CEO, Global Partnership for Sustainable Development Data.

Chair: Dr Tim Doberman, Director of Research, International Growth Centre, LSE.

Visions for the future with Lila Ibrahim

LSE Festival event 20 June 2025

Speaker: Lila Ibrahim, Chief Operating Officer, Google DeepMind.

Chair: **Professor Cosmina Dorobantu**, Senior Advisor, Data

Science Institute, LSE.

Explore AI adventures with ChatGPT for learning, art and music

LSE Festival Family Day Event 21 June 2025

Facilitated by **Professor Michael Muthukrishna**, DSI Affiliate and Professor of Economic Psychology, Department of Psychological and Behavioural Science, with support from Research Assistants **Nivain Goonasekera** and **Karlijn Vanoppen**, Department of Psychological and Behavioural Science, and the London School of Artificial Intelligence.

Big data for public good

LSE Festival event co-hosted with the Department of Statistics 21 June 2025

Speakers: **Dr Sara Geneletti**, Associate Professor, Department of Statistics, LSE; **Dr Laura Gilbert**, Senior Director of AI, Tony Blair Institute for Global Change; **Professor Helen Margetts**, Professor of Society and the Internet, University of Oxford.

Chair: **Professor Cosmina Dorobantu**, Senior Adviser, Data Science Institute, LSE.

Research events

Honest computing: driving data and process-sensitive policies

Co-hosted with Imperial College London 8 October 2024

Speaker: Dr Florian Guitton, Researcher, Imperial College London.

Chair: **Professor Martin Anthony**, Director, Data Science Institute, LSE.

DSI Research Showcase 2024

6 December 2024

Speakers: **Dr Kaveh Salehzadeh-Nobari**, Postdoctoral Researcher, The inclusion Initiative, LSE; **Professor Astrid Krenz**, Miguel Dols Fellow, Cañada Blanch Centre, LSE; **Dr Casey Kearney**, Assistant Professor, School of Public Policy, LSE.

Chair: **Professor Martin Anthony**, Director, Data Science Institute. LSE.

CIVICA Data Science seminar: honest computing

11 December 2024

Speaker: **Dr Florian Guitton**, Researcher, Imperial College London.

Chair: **Dr Ghita Berrada**, Assistant Professor (Education), Data Science Institute, LSE.

DSI Squared seminar: male excess mortality

Co-hosted with the Data Science Institute, Imperial College London 10 February 2025

Speakers: **Professor Astrid Krenz**, Miguel Dols Fellow, Cañada Blanch Centre, LSE.

Chair: **Dr Mark Kennedy**, Director, Data Science Institute, Imperial College London.

Beyond productivity: effects of algorithmic output on engagement, learning and distinctiveness

13 February 2025

Speaker: Dr Anuschka Schmitt, Assistant Professor, Department of Management, LSE.

Chair: Professor Martin Anthony, Director, Data Science Institute, LSE.

DSI PhD Affiliate lightning talks

18 February 2025

Speakers: **Haoran Shi**, Department of Psychological and Behavioural Science; Hannah Bunt, Department of Psychological and Behavioural Science; Aristeidis Grivokostopoulos, Department of Economic History; Edward Plumb, Department of Mathematics; Gaetano Inglese, Department of Government.

(De)constructing health and wellbeing through data seminars

25 and 26 February 2025

Speakers: Dr Joana Cruz, Research Fellow, UCL Institute of Child Health; Dr Alistair Ford, Senior Lecturer in Geospatial Data Analytics and School X Climate Fellow, Newcastle University; **Dr Alexandra Gomes**, Research Fellow, LSE Cities; lain Goodwin, Strategic Development Manager for Health & Social Care, Ordnance Survey; Maggie MacLellan, ONS Natural Capital Team; Robert Shaw, Assistant Director of Analytics, NHS England.

DSI PhD Affiliate lightning talks

6 March 2025

Speakers: Chuyao Wang, Department of Methodology; Roop Bhadury, Department of Management; Zarja Hude, LSE Law School; Shivani Rao, Department of Media and Communications; Sia Sha, Department of Psychological and Behavioural Science; Vincent Chung, Department of Geography and Environment; Roberto Rafael Maura Rivero, Department of Economics.

Al and finance - collaborative frontiers

Co-hosted with King's College London's Institute for Artificial Intelligence 11 April 2025

Speakers: Dr Siliva Bartolucci, Associate Professor in the Department of Computer Science, UCL; Dr Bart De Keijzer, Senior Lecturer in Computer Science, King's College London; Dr James Hamp, Director and Head of FX Data Strategy and Analytics, Citi; Dr Christian Julliard, Associate Professor of Finance, LSE.

Al an ML in finance - shaping the future of financial markets

Co-hosted with the International Association for **Quantitative Finance** 24 June 2025

Speakers: Giovanni Beliossi, Head of Investment Strategies, Axyon Al, UK; **Peter Hafez**, Chief Data Scientist, RavenPack and Bigdata.com; Dr Petter Kolm, Professor, NYU Courant, US; Professor Johannes Muhle-Karbe, Professor, Imperial College London; Hilary Till, Principal, Premia Research, US.

Chair: Professor Johannes Ruf, Professor in Department of Mathematics and Deputy Director, Data Science Institute, LSE.

Student events

Welcome week

How to study data science at LSE: student perspective

25 September 2024

Speakers: Alexey Burmistrov, BSc Economics; Sonja Belkin, BSc Psychological and Behavioural Studies; Kristina Dixon, BSc Economics; Jessie Zhang, BSc Politics and Data Science; Aksh Sabherwal, BSc Economics.

Chair: **Dr Jon Cardoso-Silva**, Assistant Professor (Education), Data Science Institute, LSE.

Industry visits

Bank of England

22 October 2024

Cabinet Office

19 February 2025

Careers in Data Science

Navigating Data Science, from academia to media and beyond

23 October 2024

Speakers: **Tabtim Duenger**, Senior Data Scientist, The Economist; **Riya Chhikara**, Data Scientist, The Economist.

Data Science across industries

3 December 2024

Speaker: **Christian Svalesen**, Senior Machine Learning Engineer, SoundCloud.

Data (and data science) in the markets divisions of investment banks

1 April 2025

Speaker: **Dr James Hamp**, DSI Visiting Fellow and Head of FX Data Strategy and Analytics at Citi..

Ise.ac.uk/DSI/Events Appendix | DSI Events 2024/25 43

The information in this publication can be made available in alternative formats. If required, please email dsi.admin@lse.ac.uk

Design: West9 Design (west9design.co.uk).

Image credits: Cover, Unsplash+; p.3, 5, 6, 8, (top left and bottom left), 26, 38, Jim Winslet; p.9, (top right) Robin Boot; p.27, 29, LSE/Maria Moore.

The London School of Economics and Political Science is a School of the University of London. It is a charity and is incorporated in England and Wales as a company limited by guarantee under the Companies Acts (Reg No 00070527).

All rights reserved. This document may not be reproduced in part or as a whole in any format without permission in writing from the Data Science Institute, LSE.

© LSE 2025



The social sciences and artificial intelligence (AI) are fundamentally interconnected. AI is transforming how we carry out research into human behaviour, economies and societies. At the same time, the social sciences are key to building AI systems that align with human values and are designed for effective human-AI collaboration. As AI continues to influence our daily lives, social science expertise is crucial for understanding its profound and far-reaching socioeconomic consequences.

The Data Science Institute (DSI) forms the institutional hub for data science and AI activity at the London School of Economics and Political Science (LSE). Working with departments and research centres across the School, we convene, catalyse and communicate world-leading research, innovative teaching and a rich programme of engagement activities that examine how data and AI are changing our world.

As AI becomes increasingly embedded in every aspect of our lives, the DSI is committed to actively shaping a future where technology and humanity advance together for the betterment of society.

Data Science Institute
The London School of Economics
and Political Science
Houghton Street
London WC2A 2AE

dsi.admin@lse.ac.uk

lse.ac.uk/dsi





