

## Summary

Job title	Postdoctoral Researcher in AI, Privacy, and Policy
Division	Social Sciences
Department	Oxford Internet Institute
Location	1 St Giles, Oxford, OX1 3JS
Grade and salary	Grade 7: £38,674-£46,913 with a discretionary range to £52,539 per annum subject to experience
Hours	Full time - 37.5 per week
Contract type	Fixed term for 36 months or to the funding end date of 30 September 2028
Reporting to	Dr Luc Rocher
Vacancy reference	178097
Additional information	This vacancy may meet the Home Office requirements for a Certificate of Sponsorship application
Research topic	AI, Machine Learning, Statistics, Privacy, Policy, Social and Health Sciences, Reproducibility
Principal Investigator / supervisor	Dr Luc Rocher
Research group website	<a href="https://syntheticsociety.oii.ox.ac.uk/">https://syntheticsociety.oii.ox.ac.uk/</a>
Funding partner	The project is funded by the UKRI Future Leaders Fellowship

## The Role

The Synthetic Society Lab at the Oxford Internet Institute invites applications from enthusiastic and motivated candidates for a postdoctoral position working on cutting-edge research at the intersection of Machine Learning and Privacy-Enhancing Technologies, with a focus on public interest technology research.

We are looking for an individual who is interested in developing their own research questions in alignment with the research team's expertise and focus areas. We are particularly interested in investigating how modern privacy-enhancing technologies (e.g. based upon synthetic data or using formal differential privacy guarantees) impact research integrity and reproducibility. This is an exciting line of research with potential to not only improve how researchers access crucial sensitive data around the world, but also build tools for them to understand if the anonymised data they receive is “good enough” to conduct rigorous research.

The successful candidate will join a welcoming and inclusive multidisciplinary research group led by Dr Luc Rocher that investigates the societal impact of AI and technology. Our team conducts independent research to guide the development of accountable, sustainable, and safe algorithms that serve the public interest. As a group, we publish our work in peer-reviewed conferences, such as FAccT, CHI, CSCW, USENIX Security, and journals such as Nature Communications, Science Advances, and Nature Machine Intelligence. Our work has been covered by 160+ newspapers and national radio and TV stations; referenced by the European Commission, OECD, World Bank, WEF, FTC, by European data protection authorities, in US legal cases, and led to changes to the UK's Data Protection Bill.

The Oxford Internet Institute is a world-leading department at the University of Oxford, conducting multi-disciplinary research on societal challenges and opportunities in the face of rapidly advancing digital technological change. It provides a highly dynamic and supportive environment to conduct rigorous intellectual innovation that can address pressing public problems, with exposure to a broad range of researchers and policy experts from around the world. As a multidisciplinary department, we have researchers with a variety of backgrounds, from computer sciences and mathematics to sociology and philosophy, and strongly believe in the importance of equality, diversity, and inclusion. In 2022, the OII was awarded a Bronze Award in the Athena Swan Charter to promote gender equality in higher education. Please find further information below.

The Synthetic Society Lab offers a welcoming and inclusive research environment. As a group, we collaborate in conducting human-centred computing research to understand how data, digital infrastructure, and algorithms impact society. We are interested in making digital power visible to the public and guiding the development of accountable, sustainable, and safe algorithms that better serve the public interest. We produce independent and evidence-based research that upholds the public interest and informs policy interventions. We are dedicated to empowering citizens with insights that enable them to challenge opaque practices, uncover the real-world implications of tech infrastructure, and reclaim data and algorithms for public good. Our members come from diverse backgrounds and complementary disciplines, including mathematics, computer science, public policy, political science, complex systems, and human-computer interaction. We value collaboration, integrity, and inclusion, and are committed to fostering a supportive research culture.

## Responsibilities and Duties

### Key responsibilities

- Lead ground-breaking computer science research to audit AI and privacy technologies
- Collaborate in the publication of research articles in principal conferences and journals
- Assist with the supervision and mentoring of postgraduate and undergraduate projects
- Assist the group in obtaining grants from national and international funding bodies

### Specific Tasks

- Manage own academic research and coordinate related administrative activities
- Represent the group at conferences, workshops, and seminars when necessary; present work to academic, policy, and industry audiences
- Take initiative in research planning and contribute ideas for new research projects

### Additional Duties

- Develop, test, and maintain high quality, reproducible software within the group
- Collaborate in the writing of reports for submission to research sponsors
- Perform demonstrations to academic, civil society, policy, and industry visitors
- Lead policy and civil society engagement initiatives to maximise research impact
- Provide technical expertise and guidance to other group members on scientific method and software engineering practices
- Develop contacts and research collaborations within the University and the wider research, civil society, policy, and industry community
- Foster an inclusive and collaborative research culture within the group through mentoring and role modeling

## Selection Criteria

### Essential

1. Hold a PhD/DPhil (or be close to completion of) in Machine Learning, Statistics, Applied Mathematics, or relevant field
2. Possess a track record in one of the following areas and demonstrated interest in developing expertise in the others:
  - a. Original research in AI, machine learning, privacy, or a related field

- b. Policy-relevant work on the impact of AI in society, with experience engaging with civil society and public bodies
  - c. Effective communication of complex scientific ideas to a non-technical audience
- 3. Appropriate knowledge of technical skills (e.g. programming, statistics, data analysis, visualisation) and research methods to design, plan, and lead high quality original research.
- 4. Practical experience within a research environment and appropriate publication record in relevant conferences or journals
- 5. Excellent communication skills, including the ability to write for publication, present research proposals and results, and represent the research group at meetings
- 6. Ability to work with diverse teams and serve as a role model in continually striving for fairer and more inclusive workplaces.

## Desirable

- 1. Experience of independently leading and managing a discrete area of a research project
- 2. Knowledge of UK, EU, and international AI or data protection policy and regulatory trends
- 3. Ability to conduct a detailed review of recent literature
- 4. Creative approach to problem solving
- 5. Clear verbal communication skills and ability to engage with diverse audiences
- 6. Clear written communication skills and ability to write clearly for both scientific and general audiences
- 7. Ability to direct the work of postgraduate or undergraduate researchers and motivate others in maintaining high academic standards and contributing to impactful public interest technology work
- 8. Ability to prioritise own work in response to deadlines

## Pre-employment screening

### Standard checks

If you are offered the post, the offer will be subject to standard pre-employment checks. You will be asked to provide: proof of your right-to-work in the UK; proof of your identity; and (if we haven't done so already) we will contact the referees you have nominated. If you have previously worked for the University we will also verify key information such as your dates of employment and reason for leaving your previous role with the department/unit where you worked. You will also be asked to complete a health declaration so that you can tell us about any health conditions or disabilities for which you may need us to make appropriate adjustments.

Please read the candidate notes on the University's pre-employment screening procedures at: <https://www.jobs.ox.ac.uk/pre-employment-checks>.

## About the University of Oxford

Welcome to the University of Oxford. We aim to lead the world in research and education for the benefit of society both in the UK and globally. Oxford's researchers engage with academic, commercial and cultural partners across the world to stimulate high-quality research and enable innovation through a broad range of social, policy and economic impacts.

We believe our strengths lie both in empowering individuals and teams to address fundamental questions of global significance, while providing all our staff with a welcoming and inclusive workplace that enables everyone to develop and do their best work. Recognising that diversity is our strength, vital for innovation and creativity, we aspire to build a truly diverse community which values and respects every individual's unique contribution.

While we have long traditions of scholarship, we are also forward-looking, creative and cutting-edge. Oxford is one of Europe's most entrepreneurial universities and we rank first in the UK for university spin-outs, and in recent years we have spun out 15-20 new companies every year. We are also recognised as leaders in support for social enterprise.

Join us and you will find a unique, democratic and international community, a great range of staff benefits and access to a vibrant array of cultural activities in the beautiful city of Oxford.

For more information, please visit [www.ox.ac.uk/about/organisation](http://www.ox.ac.uk/about/organisation).

## The Oxford Internet Institute (OII)

The Oxford Internet Institute – founded in 2001 - is a multidisciplinary research and teaching department of the University of Oxford, dedicated to the social science of the Internet.

Digital connections are now embedded in almost every aspect of our daily lives, and research on individual and collective behaviour online is crucial to understanding our social, economic, and political world.

- **Research:** We have unprecedented access to a huge volume of rich social data, and are developing new theories, concepts and methods to analyse it.
- **Teaching:** Our Masters and doctoral programmes bring students from all over the world, to work with our faculty at the cutting edge of their fields.
- **Policy:** We provide the empirical data and conceptual analysis that is so needed to design policy solutions to societal problems.

Our academic faculty and graduate students are drawn from many different disciplines: we believe this combined approach is essential to tackle society's 'big questions'. Together, we aim to positively shape the development of our digital world for the public good.

The OII aims to operate at the cutting edge in both quantitative, qualitative and computational methodologies that cut across disciplines and topics. The core of our activity is to develop rigorous peer-reviewed research and disseminate the outputs in high-quality journals, while working together with partners and stakeholders to inform and shape policy and practice.

Our research focuses on areas critical to the public interest and in many cases to advancing fairness in technology. Our research has already delivered significant impact. Our faculty were among the first to draw the world's attention to "fake news" and defined the concept of "big data". They have undertaken ground-breaking research into technology and wellbeing using real-time industry data and persuaded major global firms to adopt new methods and practices. OII researchers have developed the first global ratings system for firms operating in the gig economy and had a significant role in influencing the online harms debate in the UK.

Our four teaching programmes graduate around 80 students a year across our two Masters programmes in addition to around seven doctoral students. Many of our talented alumni go on to perform important roles and achieve significant accomplishments in the world of policymaking, technology development, civil society and academia.

In 2025, the OII will take up residence in the new Schwarzman Centre for the Humanities, moving from our current location across three sites on St Giles.

For more information about the Oxford Internet Institute please visit <https://www.oii.ox.ac.uk/>.

## The Social Sciences Division

The University's academic departments and faculties are organised into four large groups known as Academic Divisions (Social Sciences, Mathematical, Physical and Life Sciences (MPLS), Medical Sciences, and Humanities). The divisions are responsible for academic strategy and operational planning, oversight of the teaching and research of their constituent departments and faculties, and for personnel and resource management. The social sciences at Oxford are distinctive for both their depth and breadth, with over 1,100 academic and research staff working across fifteen departments, faculties and schools. The Head of the Social Sciences Division is Professor Timothy Power.

The Division is a world-leading centre of research and education in the social sciences. The Times Higher Education (THE) University Rankings returned the University of Oxford to the number one spot in the world for Social Sciences in 2022. We have placed first in three of the last five years (2018, 2019 and 2022).

More than 800 researchers were returned to Main Panel C (Social Sciences) for REF 2021 across a diverse range of subject area 'units of assessment' – from geography and business to archaeology and law. Over 55% of the research submitted from the Division was judged to be world-leading (4\*, the highest score available). More than two-thirds (69%) of the research's impact was also recognised as world-leading (4\*). Research from across the Division was also submitted to subject areas across Panels A (Medicine, health and life sciences), B (Physical sciences, engineering and mathematics), and D (Arts and Humanities), highlighting the enormous breadth and diversity of research expertise across the Division.

Our academic and research staff and students are international thought leaders, generating new evidence, insights and policy tools with which to address some of the major global challenges facing humanity, such as sustainable resource management, poverty and forced migration, effective governance and justice. Particular research highlights in recent years have included COVID-19 and Climate Change. As well as active interdisciplinary links with researchers in other divisions at Oxford, we engage and collaborate extensively with other universities and a wide range of governmental and non-governmental practitioner communities such as law, business, public health and welfare, international development and education around the world. The Division has an extensive portfolio of external funders, partners and supporters, with competitively-awarded external research income exceeding £50 million per year and philanthropic income over £25 million a year. As part of our commitment to equality of opportunity, eight of our departments have achieved bronze Athena SWAN awards (a UK accreditation scheme recognising organisations' commitment to equality and diversity, particularly in gender): Archaeology, the Blavatnik School of Government, Economics, Education, International Development, Law, Anthropology & Museum Ethnography, and the Saïd Business School. Our School of Geography and the Environment holds an Athena SWAN silver award. All of our other departments are either in the process of applying or are scheduled to do so shortly.

The Division delivers an exceptional range of high-quality educational programmes all underpinned by the innovative research being undertaken by our academics. The student body is made up of over 2,000 undergraduate students, nearly 3,000 students studying postgraduate taught programmes and 1,200 postgraduate research students. The programmes we offer are wide-ranging, often interdisciplinary and include professionally-oriented provision in areas such as business, law and education. The Division is home to several of Oxford's most widely recognised teaching programmes, such as Philosophy, Politics and Economics (PPE) at undergraduate level; and at the Masters level programmes such as the Bachelor in Civil Law (BCL), Environmental Change and Management, International Relations, and Social Data Science.

For more information, please visit: [www.socsci.ox.ac.uk](http://www.socsci.ox.ac.uk).

## How to apply

Applications are made through our online recruitment portal. Information about how to apply is available on our Jobs website <https://www.jobs.ox.ac.uk/how-to-apply>.

Your application will be judged solely on the basis of how you demonstrate that you meet the selection criteria stated in the job description.

As part of your application you will be asked to provide details of two referees and indicate whether we can contact them now.

You will be asked to upload a CV and a supporting statement. The supporting statement must explain how you meet each of the selection criteria for the post using examples of your skills and experience. This may include experience gained in employment, education, or during career breaks (such as time out to care for dependants)

Please upload all documents **as PDF files** with your name and the document type in the filename.

All applications must be received by **midday** UK time on the closing date stated in the online advertisement.

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### Information for priority candidates

A priority candidate is a University employee who is seeking redeployment because they have been advised that they are at risk of redundancy, or on grounds of ill-health/disability. Priority candidates are issued with a redeployment letter by their employing department(s).

If you are a priority candidate, please ensure that you attach your redeployment letter to your application (or email it to the contact address on the advert if the application form used for the vacancy does not allow attachments).

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### If you need help

Application FAQs, including technical troubleshooting advice is available at: <https://staff.web.ox.ac.uk/recruitment-support-faqs>

Non-technical questions about this job should be addressed to the recruiting department directly: [recruit@oii.ox.ac.uk](mailto:recruit@oii.ox.ac.uk).

To return to the online application at any stage, please go to: [www.recruit.ox.ac.uk](http://www.recruit.ox.ac.uk).

Please note that you will receive an automated email from our online recruitment portal to confirm receipt of your application. **Please check your spam/junk mail** if you do not receive this email.



## Important information for candidates

### Data Privacy

Please note that any personal data submitted to the University as part of the job application process will be processed in accordance with the GDPR and related UK data protection legislation. For further information, please see the University's Privacy Notice for Job Applicants at: <https://compliance.admin.ox.ac.uk/job-applicant-privacy-policy>. The University's Policy on Data Protection is available at: <https://compliance.admin.ox.ac.uk/data-protection-policy>.

### The University's policy on retirement

The University operates an Employer Justified Retirement Age (EJRA) for very senior research posts at **grade RSIV/D35 and clinical equivalents E62 and E82** of 30 September before the 70<sup>th</sup> birthday. The justification for this is explained at: <https://hr.admin.ox.ac.uk/the-ejra>.

For **existing** employees on these grades, any employment beyond the retirement age is subject to approval through the procedures: <https://hr.admin.ox.ac.uk/the-ejra>.

There is no normal or fixed age at which staff in posts at other grades have to retire. Staff at these grades may elect to retire in accordance with the rules of the applicable pension scheme, as may be amended from time to time.

### Equality of opportunity

Entry into employment with the University and progression within employment will be determined only by personal merit and the application of criteria which are related to the duties of each particular post and the relevant salary structure. In all cases, ability to perform the job will be the primary consideration. No applicant or member of staff shall be discriminated against because of age, disability, gender reassignment, marriage or civil partnership, pregnancy or maternity, race, religion or belief, sex, or sexual orientation.

## Benefits of working at the University

### Employee benefits

University employees enjoy 38 days' paid holiday, generous pension schemes, travel discounts, and a variety of professional development opportunities. Our range of other employee benefits and discounts also includes free entry to the Botanic Gardens and University colleges, and discounts at University museums. See <https://hr.admin.ox.ac.uk/staff-benefits>

### University Club and sports facilities

Membership of the University Club is free for all University staff. The University Club offers social, sporting, and hospitality facilities. Staff can also use the University Sports Centre on Iffley Road at discounted rates, including a fitness centre, powerlifting room, and swimming pool. See [www.club.ox.ac.uk](http://www.club.ox.ac.uk) and <https://www.sport.ox.ac.uk/>.

### Information for staff new to Oxford

If you are relocating to Oxfordshire from overseas or elsewhere in the UK, the University's Welcome Service website includes practical information about settling in the area, including advice on relocation, accommodation, and local schools. See <https://welcome.ox.ac.uk/> There is also a visa loan scheme to cover the costs of UK visa applications for staff and their dependants. See <https://staffimmigration.admin.ox.ac.uk/visa-loan-scheme>

### Family-friendly benefits

With one of the most generous family leave schemes in the Higher Education sector, and a range of flexible working options, Oxford aims to be a family-friendly employer. We also subscribe to the Work+Family Space, a service that provides practical advice and support for employees who have caring responsibilities. The service offers a free telephone advice line, and the ability to book emergency back-up care for children, adult dependents and elderly relatives. See <https://hr.admin.ox.ac.uk/my-family-care>. The University has excellent childcare services, including five University nurseries as well as University-supported places at many other private nurseries. For full details, including how to apply and the costs, see <https://childcare.admin.ox.ac.uk/>

### Disabled staff

We are committed to supporting members of staff with disabilities or long-term health conditions. For further details, including information about how to make contact, in confidence, with the University's Staff Disability Advisor, see <https://edu.admin.ox.ac.uk/disability-support>

### Staff networks

The University has a number of staff networks including the Oxford Research Staff Society, BME staff network, LGBT+ staff network and a disabled staff network. You can find more information at <https://edu.admin.ox.ac.uk/networks>

### The University of Oxford Newcomers' Club

The University of Oxford Newcomers' Club is an organisation run by volunteers that aims to assist the partners of new staff settle into Oxford, and provides them with an opportunity to meet people and make connections in the local area. See [www.newcomers.ox.ac.uk](http://www.newcomers.ox.ac.uk).

### Oxford Research Staff Society (OxRSS)

A society run by and for Oxford University research staff. It offers researchers a range of social and professional networking opportunities. Membership is free, and all researchers employed by Oxford University are welcome to join. Subscribe at [researchstaff-subscribe@maillist.ox.ac.uk](mailto:researchstaff-subscribe@maillist.ox.ac.uk) to join the mailing list to find out about upcoming events and other information for researchers, or contact the committee on [committee@oxrss.ox.ac.uk](mailto:committee@oxrss.ox.ac.uk). For more information, see [www.ox.ac.uk/oxrss](http://www.ox.ac.uk/oxrss), Twitter @ResStaffOxford, and Facebook [www.facebook.com/oxrss](http://www.facebook.com/oxrss).