

Research Associate in Modelling Network Data (x2)

Institute of Criminology

Closing date: 26th May 2024

Job Reference: JL41357



Research Associate in Modelling Network Data

Salary:

*Research Associate
£36,024 - £44,263

Research Assistant
£29,605 - £33,966

*Appointment to Research Associate is dependant of having a PhD. Those who have submitted but not yet received their PhD will be appointed as a Research Assistant, which will be amended to Research Associate once the PhD has been awarded.

Contract:

Nuffield Foundation project: Fixed Term for 18 months

ESRC funded project: Fixed Term for 15 Months

Location:

Cambridge

Faculty / Department:

Institute of Criminology

Responsible to:

Dr Paolo Campana

Working Pattern:

Full Time

Purpose of the role

Dr Paolo Campana, University Associate Professor in Criminology and Complex Networks, is inviting applications for x2 Research Associates, specialising in quantitative network modelling, to join him working on 2 separate research projects – Breaking Networks of Youth Serious Violence (Nuffield Foundation funded) and Modelling Networked Violence and Co-Offending (ESRC funded). Although requiring identical skills, the projects are independent of each other.

Both positions are due to start on 1st September 2024.

The two research projects are as follows:

Breaking Networks of Youth Serious Violence in the UK (Nuffield Foundation funded)

This post-doctoral Research Associate position will be working under the supervision of Dr Paolo Campana (Principal Investigator) alongside an international team at the University of Exeter and the Australian Catholic University on a Nuffield Foundation-funded project on youth serious violence.

The overall research aim is to apply a relational (network)

approach to understand – and break – networks of serious violence among young people. The project is quantitative in nature and will leverage mid- and large-scale databases to identify the mechanisms underpinning violent behaviour among at-risk young people in Cambridgeshire.

The project also aims at developing evidence-based strategies to prevent at-risk young people from committing and/or being a victim of serious violence by targeting relational factors and helping practitioners to better target their efforts.

This position is 18 months fixed-term.

A Relational Approach to Serious Violence and Co-Offending (ESRC funded)

This post-doctoral Research Associate position will be working under the supervision of Dr Paolo Campana (Principal Investigator) and Dr Cecilia Meneghini (Co-I, University of Exeter) on an ESRC-funded project on networked violence (and co-offending).



Purpose of the role continued...

The overall research aim is to enhance our understanding of the role of networks in the emergence and continuity of violence. The project will leverage large-scale police records to reconstruct networks of cooperation and violence and identify mechanisms underpinning both phenomena (as they are often interlinked). Key to the project is a social network analysis approach. One of our main goals is to develop the application of cutting-edge network models to the study of both violence and cooperation among individuals and groups identified as at-risk by the police.

The post-doctoral researcher will play a key role in building networks from large-scale datasets, testing hypotheses and carrying out quantitative analysis.

Funding is available up to an initial end date of 30th November 2025.

Key duties and responsibilities (for both positions)

Work closely with Dr Campana and the wider team, making a key contribution the project with specific duties which include:

- Independently carry out quantitative network modelling on mid- to large-scale datasets.
- Collect further data from openly available repositories (e.g., Office for National Statistics)
- Actively engage with stakeholders to disseminate the project's findings.
- Present data and results both within the team and externally.
- Contribute to the planning of joint research projects led by Principal Investigator
- Assist with dissemination of findings by drafting manuscripts and abstracts for publication.
- Assist with training and/or informal supervision of students as required

Since some data may be confidential, the Research Associate might be asked to sign an NDA (Non-disclosure/confidentiality agreement) to ensure that data are not shared or discussed with third parties.

Please note following salary information for these appointments –

Research Associate: £36,024 - £44,263 (Grade 7). Appointment at Research Associate level is dependent on having a PhD. Those who have submitted but not yet received their PhD, will initially be under-appointed as a Research Assistant (Grade 5, Point 38 - £32,982), moving to Research Associate (Grade 7) upon confirmation of their PhD award.

Person Specification

Criteria	Essential	Desirable
Education		
Applicants must have, or be close to obtaining, a PhD in Social Sciences broadly conceived with a strong quantitative component, including Sociology, Economics, Criminology, Statistics and Data Science, or in the border Network Science field including Computer Science, Physics and Public Health	✓	
Specialist Knowledge and Skills		
Advanced network modelling experience and expertise	✓	
Expertise in quantitative/computational methods	✓	
Strong programming skills	✓	
Programming expertise in R or Python		✓
Ability to test hypotheses using quantitative data and independently analyse quantitative data	✓	
Relevant experience		
Ability to conduct individual and collaborative research projects	✓	
Experience of studying crime-related themes, including violence		✓
Interpersonal and Communication Skills		
Proven organisational, communication and team working skills.	✓	
Ability to plan and manage own research activity in collaboration with others	✓	
Additional requirements	✓	
Ability to write up research work for presentation and publication	✓	
Willingness to continually update knowledge in the specialist area and engage in continuous professional development	✓	

Institute of Criminology



The Institute of Criminology at the University of Cambridge, UK, has a worldwide reputation for excellence in both research and teaching.

Originally founded by [Sir Leon Radzinowicz](#) in 1959, was one of the first criminological institutes in Europe and has exerted a strong influence on the development of the discipline. Many of the academic staff are international leaders in their fields. Staff hail from multidisciplinary international backgrounds and their interests cover a broad range of topics. In recognition of their outstanding research, Cambridge criminologists have been awarded numerous prestigious international awards.

The Institute is a thriving research and teaching department of around 70 members of staff (academic, research and administrative staff). The teaching carried out by the Institute is primarily postgraduate, although undergraduate courses are taught across the Faculty of Law, Human, Social, and Political Sciences, and Psychology and Behavioural Sciences.

Information about our teaching and research can be found here on our [courses](#) and [research](#) pages.

The Institute is one of the leading criminology departments in the world with a strong reputation in both basic and applied research. The Institute runs two MPhil programmes (the MPhil in Criminological Research and the MPhil in Criminology), as well as a PhD programme (there are currently around forty PhD students). In addition to these full-time courses, the Institute runs two part-time MSt programmes for senior criminal justice practitioners.

The Institute is also home to the [Radzinowicz Library](#), which houses the most comprehensive criminology collection in the United Kingdom.

The Institute of Criminology, as with the University of Cambridge as a whole, is committed in its pursuit of academic excellence to equality of opportunity and to a proactive and inclusive approach to equality, which supports and encourages all under-represented groups, promotes an inclusive culture, and values diversity.

School of Humanities and Social Sciences

The Institute of Criminology is within the School of the Humanities and Social Sciences

About the School

The School of the Humanities and Social Sciences includes a wide range of disciplines with differing methodologies, from highly quantitative analysis of 'big data' to ethnography and the analysis of the material culture and thought of past societies. The geographical range is equally broad, with Centres of African, Latin American and South Asian Studies, and specialists within each Department or Faculty.

Each institution has its own well developed research profile, but increasingly we are working across disciplinary boundaries within the School and with colleagues in other Schools.

The School is participating in university-wide Strategic Research Initiatives such as public health, global food security, energy and conservation which bring the insights of social sciences to bear on some of the major issues facing the world today; Cambridge is one of the world's leading centres for science, technology and medicine, and the social sciences are now playing an increasingly important role in understanding the social, political and economic contexts.

We are fortunate in the provision of research funds from the Philomathia Foundation for the Social Science Research Programme.

The School is, in terms of student numbers, the largest of the six Schools in the university.



Full information regarding the School can be found at <https://www.cshss.cam.ac.uk/>

Terms of Appointment

Tenure and probation

Appointments will be made on a fixed-term basis (Nuffield Foundation Project 18 months; ESRC project 15 months) Appointments will be subject to satisfactory completion of a six-month probationary period.

Hours of Work and Working Pattern

The hours of work for the position full-time (37hrs per week), working Monday – Friday.

Pension

You will automatically be enrolled to become a member of USS (Universities Superannuation Scheme) – a hybrid pension scheme. For further information please visit: www.pensions.admin.cam.ac.uk/.

Annual leave

Full time employees are entitled to annual paid leave of 41 days inclusive of public holidays. For new part-time employees, annual leave will be pro rata'd based on days worked.

General information

Pre-employment checks

Right to work in the UK

We have a legal responsibility to ensure that you have the right to work in the UK before you can start working for us. If you do not have the right to work in the UK already, any

offer of employment we make to you will be conditional upon you gaining it.

Health declaration: Once an offer of employment has been made the successful candidate will be required to complete a work health declaration form.

Qualifications: The person specification for this position lists qualifications that are essential and/or desirable. Please note that if you are offered the post you will be asked to provide your relevant original certificates of these qualifications.

References: Offers of appointment will be subject to the receipt of satisfactory references.

Information if you have a disability

The University welcomes applications from individuals with disabilities. We are committed to ensuring fair treatment throughout the recruitment process. We will make adjustments to enable applicants to compete to the best of their ability wherever it is reasonable to do so and, if successful, to assist them during their employment.

Information for disabled applicants is available at <http://www.admin.cam.ac.uk/offices/hr/staff/disabled/>

We encourage you to declare any disability that you may have, and any reasonable adjustments that you may require, in the section provided for this purpose in the application form. This will enable us to accommodate your needs throughout the process as required. However, applicants and employees may declare a disability at any time.

If you prefer to discuss any special arrangements connected with a disability, please contact, the Department Administrator, who is responsible for recruitment to this position. Alternatively, you may contact the HR Business Manager responsible for the department you are applying to via hrenquiries@admin.cam.ac.uk.

The University

The University of Cambridge is one of the world's oldest and most successful universities. We are a renowned centre for research, education, and scholarship that makes a significant contribution to society. The University is consistently ranked amongst the top universities in the world. Our affiliates have won more Nobel Prizes than any other University.

Our sustained pursuit of academic excellence is built on a long history of world-leading teaching and research within a distinctive collegiate system. For eight centuries our ideas and innovations have shaped the world. Our principal goal is to remain one of the world's leading universities in an increasingly competitive global higher education sector. Today the University of Cambridge is at the centre of a cluster of over 4,300 businesses employing 58,000 people.

Our capital investment projects include academic and commercial growth at both the West Cambridge Innovation District, and the Biomedical Campus in the south of the city. Eddington, in North West Cambridge, is a mixed-use development including key worker housing for staff, a community centre and a new primary school, managed by the University. Through these projects, the University is deeply embedded in, and committed to serving, our local community. These are all conspicuous signs of a University that is not only adapting to new needs, but also anticipating the future.

Our mission is to contribute to society through the pursuit of education, learning, and research at the highest international levels of excellence. Our core values are:

- freedom of thought and expression; and
- freedom from discrimination.



About Us

The University is one of the world's leading academic centres. It comprises 150 faculties and departments, together with a central administration and other institutions. Our institutions, museums and collections are a world-class resource for researchers, students and members of the public representing one of the country's highest concentrations of internationally important collections.

The University has an annual income of £2 billion. Research income, won competitively from the UK Research Councils, the European Union (EU), major charities and industry, exceeds £500 million per annum and continues to grow.

The Colleges and the University remain committed to admitting the best students regardless of their background and to investing considerable resources both in widening access and financial support. The 31 Colleges are self-governing, separate legal entities which appoint their own staff. Many academic staff are invited to join a College as a Teaching Fellow, which provides a further social and intellectual dimension. The Colleges admit undergraduate students, provide student accommodation and pastoral support and deliver small group teaching for undergraduates.

The University awards degrees and its faculties and departments provide lectures and seminars for students and determine the syllabi for teaching.

Our instinct for seeking out excellence and setting up enduring and mutually beneficial collaborations has led us to establish strategic partnerships across the globe. Whether it is the successful Cambridge-Africa Programme involving universities in Ghana, Uganda and elsewhere on the African continent; or the close association with the government of India to pursue new research in crop science; or the creation, with Germany's Max Planck Institutes, of a Cambridge-based centre for the study of ethics, human economy and social change – international partnerships are now an inextricable part of the University's make-up.

“Cambridge graduates and researchers have made – and continue to make – a colossal contribution to human knowledge and the understanding of the world around us. Their work touches on the lives and livelihoods of everyone from patients diagnosed with life-threatening diseases, to residents of areas critically affected by climate change, to children growing up in conflict zones. It has a lasting impact on our society, our economy and our culture: the world is truly a better place thanks to their efforts.”

Stephen Toope, Vice Chancellor 2019



Working at the University

Working at Cambridge you will join a diverse, talented and innovative community, with more than 23,000 students and over 16,000 staff from all walks of life and corners of the world.

The University continually explores strategies to attract and retain the best people. It is committed to supporting its staff to achieve their best. We are a fair, diverse and inclusive society and we believe our staff are our greatest asset. There is strong commitment to developing institutional leadership and supporting and encouraging staff development at all levels.

We offer a variety of roles including academic, research, professional, managerial and support roles. We also offer extensive benefits and excellent learning opportunities within a stimulating working environment.

The University's estate is undergoing the most significant transformation in its history. Cambridge has been able to create a science and technology campus to the west of the city centre, and is expanding further to the north west of Cambridge including investing in affordable homes for University key workers and community facilities. Even with our continued development, the University remains within walking or cycling distance across the campus. The University is a major partner on the Cambridge Biomedical Campus and we continue to redevelop our historic city centre sites demonstrating our determination to ensure that we can offer the best facilities and opportunities for our staff and students.



Equality & diversity

The University has built its excellence on the diversity of its staff and student community. We aim to be a leader in fostering equality and inclusion, and in promoting respect and a sense of belonging for all. We encourage applications from all sections of society. All appointments are made on the basis of merit. We have an Equal Opportunities Policy, along with a range of diversity groups, including the Women's Staff Network, Race Equality Network and LGBT+ Staff Network. More details are available here:

<http://www.equality.admin.cam.ac.uk/>

The University has a bronze Race Equality Charter award, with a framework for improving the representation, progression and success of minority ethnic staff and students within higher education. Furthermore, the University's silver Athena swan award recognises and celebrates good practice in recruiting, retaining and promoting gender equality.

Living in Cambridge

Cambridge is rich in cultural diversity. From beautiful University and College buildings, museums and art galleries, quaint gardens and punts on the River Cam, to a vibrant restaurant and café scene, our employees are surrounded by the wonderful features of this unique city.

You can find a wide-range of high street shops and 3 shopping centres, with independent alternatives at the historic market and nestled within the passageways in the city centre. You will find a cinema, bowling alley, a nightclub and various live performances at the Cambridge Leisure Park, with further entertainment options at the Corn Exchange, Arts Theatre and the ADC Theatre. Further information can be found on the Visit Cambridge website.

If you prefer the faster pace of life, London is a 45 minute train journey away. For those travelling from overseas, Stansted Airport is just 45 minutes away and Heathrow Airport under 2 hours away. The University is a short distance from a host of other attractions such as Ely Cathedral, Newmarket Races and various wildlife parks and stately homes. Cambridge is also within easy reach of the beautiful Broads and coastlines of Norfolk and Suffolk.

Relocation Support

The University recognises the importance of helping individuals to move and settle into a new area. We provide support and guidance to those relocating internationally or domestically to take up a post at the University of Cambridge, liaising with other University offices and selected partners to ensure comprehensive relocation support is available. This includes: accommodation, childcare, schools, banking, immigration and transport. If you would like further information, please visit <https://www.accommodation.cam.ac.uk/RelocationService/>. The Shared Equity Scheme and the Reimbursement of Relocation Expenses Scheme provide financial assistance to qualifying new members of staff with the costs of relocating to Cambridge.

Accommodation Service

The University Accommodation Service helps staff, students and visiting scholars who are affiliated to the University in their search for suitable accommodation in Cambridge. The dedicated accommodation team can provide access to a wide range of University-owned furnished and unfurnished properties, and has a database of private sector accommodation available for short and long-term lets. For further information and to register with this free service please visit <https://www.accommodation.cam.ac.uk/>



What Cambridge can offer

We offer a comprehensive reward package to attract, motivate and retain high performing staff at all levels and in all areas of work.

The University offers a wide range of competitive benefits, from family leave entitlement, to shopping and travel discount schemes. Our generous annual leave package contributes to the positive wellbeing of our University employees. Sabbatical leave enables academics to focus on research and scholarship, whilst still maintaining their full salary. The University also has a [career break scheme](#) for academic and academic-related staff, with additional flexible working policies for all other staff.

Pay and benefits

The University salary structure includes automatic service-related pay progression in many of its grades and an annual cost of living increase. In addition to this, employees are rewarded for outstanding contribution through a number of regular pay progression schemes. The University offers attractive pensions schemes for employees, with an additional benefit of a salary exchange arrangement providing tax and national insurance savings.



CAMbens employee benefits

The University offers employees a wide range of competitive benefits, known as CAMbens. CAMbens offers something for everyone across a range of categories, including:

- Financial Benefits, including shopping discounts (both local and national) and a Payroll Giving scheme;
- Relocation and Accommodation Benefits, including relocation assistance and interest-free Rental Deposit Loans;
- Travel Benefits, including Cycle to Work, discounts on train season tickets and interest-free Travel to Work loans;
- Family Friendly and Lifestyle Benefits, including support with childcare and family friendly policies;
- Health and Wellbeing Benefits, including a University Staff Counselling Service, discounts at the University Sports Centre, and other local gyms, and healthcare schemes.



What Cambridge can offer

Family-friendly policies

The University recognises the importance of supporting its staff. We have a range of family-friendly policies to aid employees' work-life balance including a generous maternity, adoption and shared parental leave entitlement of 18 weeks full pay, and paid emergency leave for parents and carers.

Other family-friendly support includes:

Our highly regarded workplace nurseries, a childcare salary exchange scheme and a high quality holiday Playscheme may be available to help support University employees with caring responsibilities (subject to demand and qualifying criteria). Further childcare information can be found here:

<https://www.childcare.admin.cam.ac.uk/>

The Newcomers and Visiting Scholars Group is an organisation within the University run by volunteers whose aim is to help newly arrived wives, husbands, partners and families of Visiting Scholars and members of the University to settle in Cambridge and give them an opportunity to meet local people. The Postdoc Academy supports the postdoctoral community within Cambridge. Further details are available here: <https://www.postdocacademy.cam.ac.uk/>

Your wellbeing

The University's Sport Centre, Counselling Services and Occupational Health are just some of the support services available to University employees to promote their physical and mental wellbeing. The University delivers The Festival of Wellbeing annually, which is a programme of stimulating talks and activities, which aim to promote wellbeing and good mental and physical health. The University also hosts the [Cambridge Festival](#), which is a great opportunity to get your first taste of public engagement, through volunteering, supporting hands-on activities or proposing a talk.

Development opportunities

We support new employees to settle in through various activities as well as supporting their professional and career development on an ongoing basis. Our Personal and Professional Development (PPD) team provide development opportunities for all University employees, including face-to-face sessions, online learning modules and webinars. All employees also have unlimited access to LinkedIn Learning to support their development. Both new and existing employees can undertake funded Apprenticeships, which lead to a range of vocational and professional qualifications. We offer reduced staff fees for University of Cambridge graduate courses and the opportunity to attend lectures and seminars held by University departments and institutions. A range of University training providers also offer specialist learning and development in their own areas e.g. teaching and learning, digital literacy, finance, health and wellbeing, safety.



How to apply

Applications should be submitted online via the University of Cambridge jobs page www.jobs.cam.ac.uk by clicking “Apply online” in the job advert. You will need an email address to register for our online system.

Conversations about flexible working are encouraged at the University of Cambridge. Please feel free to discuss flexibility prior to applying (using the contact information below) or at interview if your application is successful.

Informal enquiries are welcomed and should be directed to:
Paolo Campana **Email:** pc524@cam.ac.uk

If you have any queries regarding the application process please contact **Meg Horobin HR & Facilities Coordinator**
HRCoordinator@crim.cam.ac.uk

The closing date for applications is: Sunday 26th May 2024

The interview date for the role is: 6th June 2024