JOB TITLE: RESEARCH ASSISTANT IN CYBER TERRORISM RISK MODELLING

REPORTS TO: PRINCIPAL INVESTIGATOR

The role

Centre for Risk Studies - Project on Cyber Terrorism - Cambridge Risk Framework

We are seeking to employ an experienced modeller with a background in engineering, physics or applied mathematics, or a related discipline, to join our team of risk researchers within the Centre for Risk Studies at Cambridge Judge Business School, University of Cambridge.

The Centre for Risk Studies has a track record of innovative research into the economic cost of global catastrophic cyber threat and is now embarking on new pathfinding research to document and develop a toolkit for assessing insurance losses from acts of cyber terrorism and destructive cyber crime. The design and development of this toolkit follows the successful 2017 publication of the Cyber Terrorism Insurance Futures report in collaboration with Pool Re, the UK terrorism pool, and the adjustment of that group’s policies following recommendations by the Centre.

Visit the Centre for Risk Studies website: www.jbs.cam.ac.uk/faculty-research/centres/risk

MAIN RESPONSIBILITIES

The candidate will use various modelling techniques to estimate in the impact of various scenarios on an insurance portfolio. In addition, he/she will contribute to group discussions in the development of additional scenarios.

Research

• Using large complex datasets to extract and manipulate data in the development of new models and metrics.
• Creating an adaptable model tool demonstrating the impacts of scalable cyber scenarios for shared research.
• Assembling the datasets and other inputs required for modelling, including identifying sources of data, carrying out data preparation etc.
• Presenting information on research progress and outcomes to bodies supervising research.
• Writing up results of own research and research work for presentation and publication.
• Managing own research and administrative activities, with guidance if required assist in the preparation of proposals and applications to external bodies, e.g. for funding and contractual purposes.
• Communicating material of a specialist or highly technical nature.
Liaison and networking

- Liaising with colleagues and funding sponsors on routine matters.
- Making internal and external contacts to develop knowledge and understanding and to form relationships for future collaboration.
- Building internal and external contacts and participate in networks for the exchange of information and to form relationships for future collaboration.
- Contributing to the Centre’s Viewpoints blog when appropriate.

Planning and organising

- Contributing to project management and associated tasks.
- Planning own day-to-day research activity within the framework of the agreed programme.
- Coordinating own work with that of others to avoid conflict or duplication of effort.
- Contributing to the planning of research projects.

The person

The ideal candidate should have the following qualities, skills and attributes. You are asked to provide a covering letter demonstrating how your own experience meets these requirements.

- Educated at the first degree or postgraduate level in a relevant specialist subject, for example, engineering, physics or applied mathematics.
- Exceptional quantitative skills.
- Experience in developing complex models from the ground up.
- Previous research experience will include vulnerability assessment, risk analysis, economic impact analysis, catastrophe science, and/or sustainable development.
- Driven and committed, demonstrating initiative and self-motivation.
- Previous project management experience will be an asset.
- Experience of managing own workload.
- Possess sufficient breadth or depth of knowledge in the discipline and of research methods and techniques to work within own area.
- Good time management and planning skills with a commitment to delivery.
- Skills in Excel and other Microsoft Office tools, MATLAB and Python.

Benefits

The salary will be in the range £25,728-£29,799 per annum. There will be a three-month probationary period. This is a fixed term appointment for one year in the first instance. Holiday entitlement is 33 days per annum plus eight days of public holidays.

The full incremental salary range for the position is advertised in order to demonstrate the progression for the Grade. In the majority of cases appointments will be made at the Grade minimum; only in very specific exceptional circumstances can a higher salary be offered.

The University of Cambridge comprises more than 150 departments, faculties, schools and other institutions, plus a central administration and 31 independent and autonomous Colleges. It is one of the world’s oldest and most successful Universities, with an outstanding reputation for academic achievement and research.
With excellent benefits, extensive learning opportunities and a stimulating and attractive environment, the University of Cambridge is a great place to work. Our employees are eligible for a wide range of competitive benefits and services. We give them access to numerous discounts on shopping, health care, financial services and public transport. We also offer final salary pensions and tax-efficient bicycle and car lease schemes.

We have two nurseries and a holiday play scheme to help support those with childcare responsibilities and we offer various types of family-friendly leave to aid employees’ work-life balance. In addition we operate a number of initiatives to promote career development, health and well-being.

Further details can be found at www.admin.cam.ac.uk/offices/hr/staff/benefits. There is also a range of information about living and working in Cambridge at www.jobs.cam.ac.uk.

Application arrangements

To submit an application for this vacancy, please search for this position on the University’s Job Opportunities website at www.jobs.cam.ac.uk and click on the “Apply online” button at the bottom of the relevant job description. This will route you to the University’s Web Recruitment System, where you will need to register an account (if you have not already) and log in before completing the online application form.

The closing date for applications is 7 February 2018.

Applicants are required to provide details of two referees. These will not be contacted unless the applicant is shortlisted.

Applicants who do not hear from us within six weeks of the above date should assume they have not been shortlisted.

Equality of opportunity at the university

The University of Cambridge is committed to a proactive approach to equality, which supports and encourages all under-represented groups, promotes an inclusive culture and values diversity. Entry into employment with the University is determined by personal merit and by the application of criteria required for the post. No applicant for an appointment or member of staff will be treated less favourably than another on the grounds of sex (including gender reassignment), marital or parental status, race, ethnic or national origin, colour, disability (including HIV status), sexual orientation, religion, age or socio-economic factors.

The University has various diversity networks which help it to progress equality; these include the Women’s Staff Network, the Disabled Staff Network, the Black and Minority Ethnic Staff Network and the Lesbian, Gay, Bisexual and Transgender Staff Network. In addition, the University was ranked in the top 100 employers for lesbian, gay and bisexual (LGB) staff in Stonewall’s Workplace Equality Index 2011.

Information if you have a disability

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

We encourage applicants to declare their disabilities in order that any special arrangements, particularly for the selection process, can be accommodated. Applicants or employees can declare a disability at any time.

Applicants wishing to discuss any special arrangements connected with their disability can, at any point in the recruitment process, contact a member of Cambridge Judge Business School's HR team who are responsible for recruitment to this position, on (01223) 339637 or by email on hr@jbs.cam.ac.uk. Alternatively, applicants can contact the HR Business Manager responsible for the department they are applying to via hrenquiries@admin.cam.ac.uk.