

University Assistant/Associate Professor in Algorithms and Complexity

Department of Computer Science and Technology

Closing Date: 15th December 2025
Job Reference: NR46861



University Assistant / Associate Professor in Algorithms and Complexity

Salary:

£47,389 - £59,966
(Assistant Professor)

or

£63,606 - £ 67,468
(Associate Professor)

Contract:

Full-time Established
Academic

Location:

West Cambridge

Department:

Computer Science and
Technology

Responsible to:

Head of Department

Role specific information

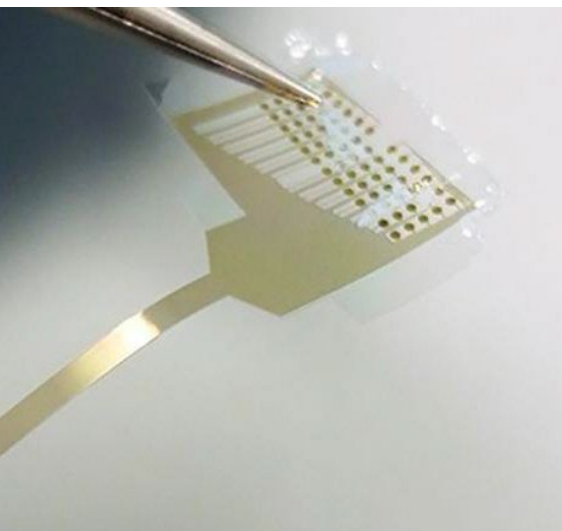
The role holder will join the Department of Computer Science and Technology as either an Assistant Professor or Associate Professor, depending on experience. The Department currently has 52 Faculty, referred to as University Teaching Officers (UTOs) in Cambridge, as well as approximately 110 postdoctoral researchers, 180 PhD students, 100 Master's students and 400 Bachelor's students.

Teaching and PhD Students

The department offers a three-year undergraduate degree in Computer Science; a research-oriented Master's degree (MPhil) in Advanced Computer Science designed to prepare students for the PhD or commercial research; and the PhD degree. All degree programmes attract exceptionally talented students from around the world, with high application numbers allowing selective admission and very high standards of attainment.

Successful applicants will contribute to all levels of teaching, with the opportunity to emphasise teaching on particular year groups and subjects of particular interest to the applicant. For MPhil teaching, there will be opportunities to develop and teach innovative content based on recent research in their own areas of interest. Successful applicants will also supervise Master's projects, and will become involved in the development of course curricula.

Across the department, the average teaching load is somewhat under 30 hours of lecturing a year. This corresponds, roughly, to one undergraduate lecture course and one MPhil module, although the Department encourages co-teaching. New UTOs are given a reduced teaching load in their first year wherever possible. Faculty are also expected to contribute to teaching administration, including student assessment and committee work as well as selecting, interviewing and advising MPhil and PhD students. Note that unlike other universities, undergraduate admissions and undergraduate small group teaching ('supervisions' in Cambridge terminology) are organised by Directors of Studies employed by the Colleges (see below) rather than by the Department.



A large proportion of research in the Department is carried out in collaboration with PhD students and post-doctoral researchers. UTOs need to apply for funding to support postdoctoral research positions, however there is support for PhD studentships from a diverse range of sources held by the Department and the University. Some PhD studentships are also available via Centres for Doctoral Training (CDTs) as well as research centres in the Department, however these sources of funds are typically restricted to particular topic areas. Most PhD studentships are awarded on the basis of the student as an applicant rather than on the faculty member who supervises them. Financial support for PhD students has increased in the last few years and numbers in the Department have grown. While faculty members are welcome to make funding applications which include PhD studentships where possible, on the whole UK funders do not fund studentships as part of normal grant applications. Some funders who do not permit PhD studentships directly will fund Research Assistants on grants; these employees may then apply to register for the PhD degree.

The successful candidate will have an excellent record of research in the subject area of algorithms and/or computational complexity, and will be expected to develop a dynamic, high quality and externally-funded research programme at an international level. Interdisciplinary and collaborative research is strongly encouraged across the university and its associated institutes. Collaborations outside academia are also highly valued, including with industry and third-sector organisations.

The successful candidate will be expected to undertake high-level research and contribute to the Department's Research profile through regular publication of internationally excellent outputs and will embed public engagement and impact into research activity. The ability to secure research funding to support your vision and build a world-class team will be also be essential.

Start-up costs

The department offers new UTOs support for their research until they are in a position to obtain their own funding.

The Head of Department will agree to a tailored package of start-up support with the successful candidate. Such support will allow the opportunity to recruit PhD students, purchase equipment, attend conferences, and so on.

Visa costs

The University will cover the visa costs and NHS surcharge fees for role holders who require a Skilled Worker or Global Talent Visa. In addition, the Department will cover the cost of family visas and NHS surcharge fees for close family members of new starters.

Research Environment

For an overview of the research environment we offer, please see our [REF 2021 Environment Statement](#). This also gives a lot more detail about working in the Department.

There is also an [informal guide for newcomers](#) about working in the Department and living in Cambridge, written by a senior member of our Department who moved to the UK from Canada.

Sabbatical Leave

Cambridge provides a generous, statutory package of sabbatical leave, which includes one term of research leave on full pay for every six terms (i.e. two years) of service. The privilege must be applied for but is not unreasonably withheld. Teaching staff use this opportunity to focus on research and scholarship. A maximum of 18 terms entitlement may be accumulated at a time, providing one year of research leave after six years of service.

College Membership

Many UTOs choose to serve as Fellows of a College. College Fellows are usually required to enter into a teaching commitment for the College, in return for which they are paid an additional salary. Additional College benefits usually include free meals, travel grants and assistance with accommodation or home loans. However, there is no guarantee that a College will offer such an arrangement, and the Department does not in any way require that a University Teaching Officer also be a member of a College.

Impact

The University's structures allow a huge amount of flexibility in research, both topic and in the way it is carried out, and the Department as a whole takes full advantage of the flexibility on offer. This helps us to ensure that our work has broad impact.

Our [REF environment statement](#) has a lot of information about impact (see section 4.1 in particular) and the way that it is facilitated by the University's IP policy (see section 1.4). However, we're interested in impact in a broader sense, and different members of faculty work in ways which have very different forms of impact. Many people seek active involvement in the development of their ideas to a form where they can really make a difference, whether by working with large or small companies, founding start-ups, working with not-for-profit organisations or other groups, entering large-scale collaborations or working with different academic fields. Departmental structures and policies have sufficient flexibility to support such activities.

Other Income

UTOs may retain external income which they receive from book royalties, consultancies, etc. The University has generous provisions for inventors to own their intellectual property. The University's Regulations concerning the ownership of intellectual property rights can be found at <https://www.admin.cam.ac.uk/univ/so/pdfs/2023/ordinance13.pdf>, pages 1073-1079. For staff who wish to commercialise their inventions, a common pathway is through Cambridge Enterprise, a wholly owned subsidiary of the University that provides contract, insurance and billing support for private consultancy, as well as IP protection, seed investment and licensing support. University staff are entitled to make their own private arrangements in all these areas if they prefer to do so.

The Department also actively encourages all members of the Department to collaborate with industry and is very open about the terms on which they do this, provided that this is compatible with their contribution to the teaching, research and work of the Department.

Person Specification

Criteria	Essential	Desirable
Education & qualifications		
Educated to degree level, normally with a PhD in a relevant specialist subject area.	✓	
A strong track record in one or relevant research areas.	✓	
Evidence of high quality research outputs.	✓	
Evidence of collaborations, or potential for collaborations if an Early Career Researcher.	✓	
Evidence of funding, or potential to obtain funding if an Early Career Researcher.	✓	
Teaching experience at undergraduate, graduate and postgraduate levels and experience of graduate student supervision and assessment are also desirable.		✓

Computer Science and Technology



The Department of Computer Science and Technology is an academic department that encompasses computer science along with many aspects of engineering, technology and mathematics. We have a world-wide reputation for academic research with consistent top research ratings. Professor Alastair Beresford is the current Head of Department.

The Department, formerly known as the Computer Laboratory, is arguably the oldest one of its kind in the world, dating back to 1937. It counts world-leading innovators such as Roger Needham and Maurice Wilkes among its past members. Building on this long and distinguished history, the Department continues with world class teaching and research. The quality of the staff and research students within the Department is key to our success. We seek to attract the best candidates in the world, while striving to increase the number of women and diversity of both staff and students alike.

The Department has an open and collaborative culture, supporting revolutionary fundamental computer science research, strong cross-cutting collaborations internally and externally, and ideas which transform computing outside the University. Please follow the links to the Themes at: <https://www.cst.cam.ac.uk/research> to find out more about our research.

Support staff play a key role in supporting the Department's academic and research endeavours. The Department provides a stimulating environment that promotes a strong sense of community, whilst valuing and recognising individual contributions.

The School of Technology

The School of Technology is one of six academic divisions at the University of Cambridge. The School brings together departments and institutes working at the forefront of technological and societal progress, including the Department of Engineering, Department of Chemical Engineering and Biotechnology, Cambridge Institute for Sustainability Leadership, Cambridge Judge Business School, and the Department of Computer Science and Technology.

Dedicated to benefitting society through advancing the frontiers of technology and the economies and enterprises into which it is deployed, we deliver outstanding education, conduct world-class research, and foster discovery and innovation. We support students, staff, industry, and society by nurturing talent, promoting individual enterprise, and building partnerships that benefit society.

We strive to continue to be a global leader in education, research, and innovation, inspiring a diverse community of staff, students, alumni, and external partners that drives technological progress and societal impact. Building on the fundamental underpinning technologies that we work on, we envision a future where our commitment to excellence and collaboration empowers individuals and industries to meet complex challenges and shape a better world. Our four strategic research themes – **Sustainable Future, Health and Wellbeing, Increased Competitiveness, and Security and Resilience** – guide interdisciplinary collaboration and reflect our ambition to address some of the most pressing global challenges through technological innovation. We are proud to foster a welcoming, inclusive, and supportive environment where people from all backgrounds can thrive.



We value diversity and promote equal opportunities, recognising that a wide range of experiences and perspectives strengthens our community and our work. International staff are a vital part of our success, and we aim to support all new colleagues in their transition to life and work in Cambridge. Our staff benefit from access to outstanding resources, a vibrant global academic community, and a wide range of personal and professional development opportunities.

The School plays a key strategic role in supporting its departments, allocating resources, shaping academic and financial planning, and advancing initiatives in research, infrastructure, education, and engagement. The School Office, led by the Head and Secretary of the School, supports governance, coordination, and services across departments.

For more information about the School and its departments, please visit:

<https://www.tech.cam.ac.uk/>

Terms of Appointment

Tenure and Probation

Appointments are to the retiring age for established academic positions. The appointment is subject to satisfactory completion of a five year probationary period.

Working Pattern

This is a full-time position.

Pension

You will automatically be enrolled to become a member of USS (Universities Superannuation Scheme) – a defined benefit and defined contribution pension scheme. For further information please visit:

www.pensions.admin.cam.ac.uk.

Annual leave

Subject to compliance with the Statutes and Ordinances relating to leave, full time officers are entitled in any holiday year to take a minimum of 28 days annual paid holiday. These periods are inclusive of public holidays that fall outside Full Term.

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.

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.

Equality, Diversity and Inclusion

The University of Cambridge 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. We particularly encourage women and /or candidates from a Black, Asian and Minority Ethnic background to apply for this vacancy as they are currently under-represented at this level within our University.

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 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 Departmental Secretary, Caroline Stewart departmental-secretary@cst.cam.ac.uk, who is responsible for recruitment to this position.

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 first-class 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 the West Cambridge site, the North West Cambridge development and the growth of the Biomedical Campus in the south of the city. The North West Cambridge development includes the opening of a primary school – the first in the UK to be managed by a University. So we are 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 students, provide student accommodation and deliver small group teaching.

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

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.

“Through its outstanding education, research and innovation, the University of Cambridge has made – and continues to make – a lasting contribution to human knowledge and is flourishing. By working at the University of Cambridge, you will be joining a vibrant community of students, scholars and professional services staff committed to supporting and enhancing the University's mission to contribute to society.”

Prof Deborah Prentice, Vice Chancellor
2023



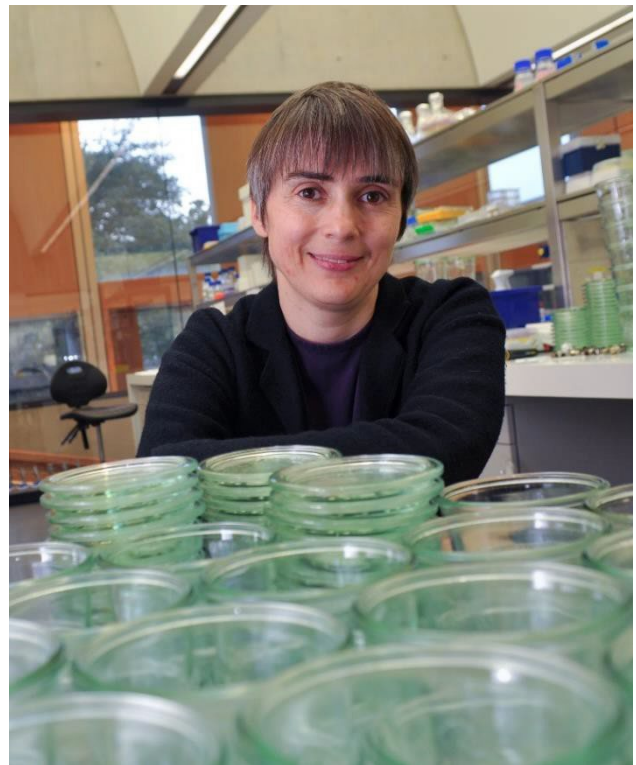
Working at the University

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 new science and technology campus to the west of the city centre, and is now 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 and inclusion

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 networks for women, black and minority ethnic and lesbian, gay, bisexual and transgender staff. More details are available here: <http://www.equality.admin.cam.ac.uk/>

The University has a bronze Race Equality Charter aware, with framework for improving the representation, progression and success of minority ethnic staff and students within higher education. Furthermore, the University's 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/>. 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. Payroll giving is also a simple, tax-efficient way for employees to make monthly donations to charity.

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 emergency family care support via My Family Care.

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 Office of Postdoctoral Affairs supports the postdoctoral community within Cambridge. Further details are available here: <https://www.opda.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. There are many societies in Cambridge catering for almost every taste and interest. Whether you want to take part in a sport, participate in music or drama, pursue a hobby, or join a political group, you will almost certainly find that a society exists for this purpose. The University also hosts the [Cambridge Science Festival](#) and [Cambridge Festival of Ideas](#), as well as [Open Cambridge](#) weekend, which together attract over 50,000 visitors per year. The festivals are 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. Please ensure that you upload the application documentation in PDF format as follows:

- Curriculum vitae with a complete list of publications
- Research statement
- Teaching statement
- Cover letter

You should also provide the contact details of three referees.

The closing date for applications is: **15th December 2025**

If you have any queries regarding the application process please contact hr-manager@cst.cam.ac.uk

Interested applicants are encouraged to make informal enquiries about the post to Professor Tom Gur at tom.gur@cl.cam.ac.uk



