



RECRUITMENT PACK

This document includes the following information:

- Job Description
 - Person Specification
 - Additional information
-

Making an application:

Please complete the short on-line application form and attach the following 2 documents:

- a) A covering letter setting out how you meet the requirements of the role as set out in the person specification.
- b) A full curriculum vitae (CV) including any publications. You should specify your 4 most significant papers published within the past 5 years (or an equivalent number appropriate to being an early career researcher). Applicants from within the UK should indicate which publications have been submitted to the current REF and any assessment of the rating for each piece of work; For more information about the REF visit www.ref.ac.uk

Shortlisting is undertaken by a panel after the closing date on the basis of information provided and failure to upload the requested documents will result in an application being rejected.

We recommend that you take a copy of this recruitment pack to help with your preparation.

Our commitment to Equality, Diversity and Inclusion

At Essex our people are at the centre of everything we do and we aspire to build a culture in which every member of the University feels valued and can flourish.

We are committed to equality of opportunity, to being fair and inclusive. We therefore particularly encourage applications from candidates who are likely to be underrepresented in our workforce.

These include people from Black, Asian and Minority Ethnic backgrounds; disabled people and LGBTQ+ people and from women in our grades 9-11 roles.

The [diversity of our community](#) is more than where our staff and students come from. More than 1000 of our staff and students identify as LGBTQ+, more than 1,300 have declared a disability and many members of our community follow a religion or belief.

You can read more about our commitment to Equality, Diversity and Inclusion [here](#).

Our [Strategy](#) sets out how we will do this through the delivery of a fair and supportive working environment for all.

The University of Essex is proud to be part of the Disability Confident scheme and is committed to supporting diversity and equality, representative of our inclusive community. As part of our commitment to this scheme any candidate who has a disability and meets all the essential criteria for the role will be offered an interview.

Please note: We are only accepting on-line applications for this post. However, if you have a disability that makes it difficult for you to provide us with information in this way, please contact the Resourcing Team (resourcing@essex.ac.uk) for help.

Closing Date: 22 November 2026

Interviews are planned for: To be confirmed

Expected start date: To be discussed at interview



UNIVERSITY OF ESSEX JOB DESCRIPTION

Job Title and Grade:	Senior Research Officer (ASR); Grade 8
Contract:	Fixed-term, Full-time for a maximum of 25 months due to a temporary funding source.
Hours:	Your hours of work are as required to perform the duties of your role, for a full-time employee this is normally 36 hours per week.
Salary:	£38,784 - £41,064 per annum
Department/Section:	School of Computer Science and Electronic Engineering
Reports on a day-to-day to:	Principal Investigator of the project
Responsible to:	Head of Department (HoD)
Purpose of role:	The successful candidate will contribute to the EU Horizon-funded research project ' <i>SAFARI: Semantic, AI-driven Federated Architecture for Resilience and Interoperability</i> ', which aims to enhance the resilience of critical infrastructures through an AI-driven decision-support and risk assessment. The role requires relevant knowledge and skills in areas such as cyber risk analysis and management, risk propagation and prediction, anomaly detection, and the use of AI and machine learning to improve resilience. The postholder will conduct high-quality, internationally recognised research, publish research outputs, engage and collaborate with project partners, and contribute to the development of future research proposals.

CONTEXT

The Senior Research Officer will work in the EU Horizon-funded research project '*SAFARI: Semantic, AI-driven Federated Architecture for Resilience and Interoperability*'. The work will be carried out at the School of Computer Science and Electronic Engineering (CSEE) and the Institute for Analytics and Data Science (IADS) of the University of Essex.

The School of Computer Science and Electronics Engineering (CSEE) has a long-standing tradition on computer networks and artificial intelligence. In the recent Research Excellence Framework 2021 (REF'2021), CSEE ranked 6th in the UK for research power and 9th for research impact (Grade Point Average). The Institute for Analytics and Data Science (IADS) was created in July 2014 to bring together all the University's expertise and work in analytics and data science. IADS research utilises new forms of data and advanced analytic techniques to tackle social challenges, engage with business and the wider non-academic community, is international in outlook and scope, and multidisciplinary and interdisciplinary by nature.

A key objective of the project will be to develop novel methods that strengthen predictive resilience and enable infrastructure systems to adapt to evolving risks over time. The specific focus of the post is to lead research on the development of infrastructure-focused risk analysis and resilience mechanisms for critical infrastructures. The Senior Research Officer will contribute to the design and development of risk identification and propagation models, cascade forecasting and risk prediction, and continuous resilience improvement.

At Senior Research Officer level, a PhD (or close to completion) in Computer Science, Cybersecurity, Artificial Intelligence, Computer Networks, or a closely related discipline relevant to the project is required as well as an appropriate publication's records for your experience.



KEY RESPONSIBILITIES OF THE POST

- To engage in individual and/or collaborative research activity resulting in internationally excellent publications that is in keeping with [Research Excellence Framework](#) (REF) criteria.
- To contribute to the SAFARI project through research and development.
- To contribute to applications for external research funding appropriate in scale to career stage and subject area norms where appropriate.
- To enhance the scholarly reputation of the Department and the University by contact with the wider academic community and supporting knowledge exchange activity.
- To undertake leadership duties related to research appropriate to career stage and as allocated by the HoD.
- To contribute expertise and knowledge to departmental and/or institutional initiatives as directed by their Head of Department.

MAIN DUTIES OF THE POST

Research

- To deliver the research objectives defined by the project under the direction and assistance of the Principal Investigator (PI) Dr. Muge Sayit, Prof. Nikos Thomos and Prof. Haris Mouratidis.
- To conduct individual and/or collaborative research necessary to achieve the planned objectives of the SAFARI project.
- To undertake high-quality independent and collaborative research in the areas of cybersecurity, cyber risk analysis, critical infrastructure resilience, and AI-enabled decision support.
- To develop AI and machine learning approaches for resilient networked systems, including anomaly detection, cascade forecasting, risk prediction, and resilience assessment.
- To contribute to the development of risk identification and propagation models covering cyber incidents, system failures, and environmental disruptions.
- To lead research on continuous resilience improvement through predictive modelling, learning-based feedback loops, and digital twin-based simulation.
- To write up research results and lead and contribute to the project's deliverables.
- To disseminate research result as appropriate through research papers, conference presentations and research visits.
- To contribute to the development and maintenance of research resources (examples of which include household surveys, databases, specialist equipment and infrastructure, software packages and computer models) used within the Department or wider user community external to the Department.
- To supervise and/or mentor postgraduate research students into relevant communities of research at Essex as appropriate to the departmental context to generate meaningful connections between research and education at Essex.



Leadership and Citizenship

- To play an active and constructive role in the Department and engage in activities beyond your own research team, (e.g. open days, staff meetings and relevant committees), as may be reasonably required by the Head of Department.
- To proactively participate in and develop internal and external networks and establish links with relevant academic and professional bodies, contacts and employers.
- To support knowledge exchange activities, for example, by contributing to the SAFARI use cases and pilot operations and engaging with organisations ensuring that appropriate impact of the research (outside academia) is achieved.
- To engage in continuing professional development in relevant subjects/disciplines, incorporating the outcomes from research and scholarship, ensuring skills are up-to-date and applied in education and research.

These duties are a guide to the work that the post holder will initially be required to undertake. They may be changed from time to time to meet changing circumstances.

TERMS OF APPOINTMENT

For a full description of the terms of appointment for this post please visit our [website](#).

UNIVERSITY OF ESSEX PERSON SPECIFICATION

JOB TITLE: Senior Research Officer (ASR); Grade 8	POST REF: REQ10341
--	---------------------------

QUALIFICATIONS / PROFESSIONAL RECOGNITION	Essential	Desirable
<ul style="list-style-type: none"> A relevant doctoral level degree (PhD) in Computer Science, Cybersecurity, Artificial Intelligence, Computer Networks, or a closely related discipline relevant to the project (or near completion). 	X	
EXPERIENCE/KNOWLEDGE	Essential	Desirable
<ul style="list-style-type: none"> Evidence of a developing research agenda, engagement in high-quality research activity and a developing research profile. 	X	
<ul style="list-style-type: none"> A developing record of publications in internationally recognised, reputable journals (and other media of similar standing) appropriate to career stage and discipline norms, or evidence of research outputs such as reports and briefings. 	X	
<ul style="list-style-type: none"> Experience of, or the ability to, generate income to support research and/or knowledge exchange appropriate to career stage and discipline norms. Would normally be a University standard to be essential, but not specifically required for this position for the duration of this contract. 	X	
<ul style="list-style-type: none"> Experience of working with developing and/or maintaining research resources used within a Department or wider user community external to the Department (examples include development of software packages and computer models). 	X	
<ul style="list-style-type: none"> Experience of contributing to small research programmes or defined areas of larger projects, and of developing research objectives and proposals. Would normally be a University standard to be essential, but not specifically required for this position for the duration of this contract. 	X	
<ul style="list-style-type: none"> Experience and knowledge of network resilience, risk analysis, and cyber resilience in critical infrastructure or distributed networked systems. 	X	
<ul style="list-style-type: none"> Experience and knowledge of AI, optimisation and machine learning techniques. 	X	
<ul style="list-style-type: none"> Experience and knowledge of AI-based anomaly detection, predictive modelling, and intelligent decision-making for networked systems or critical infrastructures. 		X
<ul style="list-style-type: none"> Experience and knowledge of risk identification, risk propagation modelling, or cascading failure analysis. 		X
<ul style="list-style-type: none"> Experience and knowledge of self-healing mechanisms, digital twins, or simulation-based resilience assessment. 		X
SKILLS/ABILITIES	Essential	Desirable
<ul style="list-style-type: none"> The ability and willingness to engage in knowledge exchange and outreach activities. 	X	



■ The ability and willingness to complement and enhance the research project/department/school's education and research strengths and areas of planned development.	X	
■ Strong communication skills, both written and verbal.	X	
■ An appreciation of the value of appropriate technologies in research and an ability and/or willingness to deploy these when relevant.		X
■ Ability to collaborate with multiple partners on large scale multinational projects.	X	
■ Programming in C/C++, Python.	X	
■ Ability to formulate optimization problems.		X
PROFESSIONAL VALUES	Essential	Desirable
■ A commitment to helping develop dynamic communities of research and education at the University.	X	
■ A strong and well-articulated commitment to the University's values and mission to deliver excellence in both education and research (integrated academic practice).	X	
■ A commitment to respect individual learners and diverse learning communities and to promote participation in higher education and equality of opportunity for all learners via student-centred practice.	X	
■ A commitment to using evidence-informed approaches and the outcomes from research, scholarship and continuing professional development in their academic practice.	X	
■ An acknowledgement of the wider context in which higher education operate.	X	
■ A willingness to participate in extra curricula departmental activities (e.g. supporting recruitment, welcome and employability).	X	
■ To be committed to sustainable education practice as defined in the University's Sustainability Sub-Strategy and our goal of achieving net zero by 2035.	X	
ELIGIBILITY	Essential	Desirable
■ The ability to meet UK 'right to work' requirements*.	X	

* In accordance with Home Office guidance and the Asylum, Immigration and Nationality Act 2006 the University of Essex has a responsibility to ensure all employees are eligible to work in the UK. Prior to commencing employment, the successful candidate will be asked to provide documentary evidence to this effect. For those who do not have a right to work in the UK, the University is a UKVI licensed sponsor and may be able to provide sponsorship to successful candidates who are offered skilled roles and meet the eligibility criteria. Further information about UK immigration requirements and working in the UK can be found on the Home Office website www.gov.uk/skilled-worker-visa



ADDITIONAL INFORMATION

Department

You can find more information about the department on our website:

<https://www.essex.ac.uk/departments/computer-science-and-electronic-engineering>

<https://www.essex.ac.uk/iads/>

Our Strategy

Please find a link to our Strategy webpages below:

<https://www.essex.ac.uk/about/university-strategy>

General information

Informal enquiries may be made to Dr Muge Sayit (email: muge.sayit@essex.ac.uk). However, all applications must be made online.

The University of Essex is a campus-based University and all academic appointments are made with the expectation that you will be present on campus to fulfil the requirements of your position. At the time of a job offer, the possibility of hybrid working, will be discussed and considered on an individual basis, but you will be required to be based within the UK.

At the University of Essex we use consistent language and terminology that articulates more clearly the responsibilities for education, research and leadership/citizenship associated with each academic role. This will help new colleagues to understand the University values from the moment they engage either as an applicant or new colleague, and help them to understand the future career pathways available to them as they become more established in their role.

We advertise our salaries on a range to indicate the trajectory of progression that can be made. Appointments are usually made at the start of the salary range. The university salary structure includes automatic pay progression within the published grades, subject to service and performance. In addition to this, there are performance related annual pay review schemes in place.

Benefits

As an employer we offer a range of benefits and a commitment to career development and equal opportunities in an environment that both reflects and creates a rich interaction of people, disciplines and ideas.

- Pension scheme
- Generous holiday entitlement
- Competitive salaries
- Training and development
- Family Friendly policies
- On campus childcare facilities, for more information visit www.wivenhoeparkdaynursery.co.uk
- Relocation support package for qualifying staff
- Interest free season ticket loan
- Range of optional salary exchange tax benefits (pension and bicycle schemes)



Staff communities, networks and forums

We are proud to have a number of [staff Networks](#) including: [Access Forum](#), [Black Asian and Minority Ethnic community Staff Forum](#), [Essex Women's Network](#), [Global Forum](#), [LGBTQ+ and Allies Community](#) and [Parent's Support Network](#).

Our Colchester campus based [Faith Centre](#) hosts regular services, meetings and events organised by our chaplains and faith representatives.

This document is produced by:

**Resourcing Team
People & Culture
University of Essex
Wivenhoe Park
Colchester CO4 3SQ
United Kingdom
Email: resourcing@essex.ac.uk**

October 2026