RESOURCING/

JOB DESCRIPTION:

Senior Lecturer / Lecturer in Cyber Security

Ref Number: CEMS-241-24
Salary Scale: Grade 8/9
Contract: Ongoing AND Full-time
School/Department: School of Computing
Location: University of Kent, Canterbury Campus
Responsible to¹: Head of School or nominee
Expected start date: 2024

The University of Kent is a leading UK institution with an excellent reputation for outstanding teaching, strong research and international links. There are many new initiatives underway to build on existing strengths, such as the Institute of Cyber Security for Society (iCSS), the Institute of Cultural and Creative Industries (iCCi), the Institute of Health, Social Care and Wellbeing (iHSCW), the Kent and Medway Medical School (KMMS).

The University has set out a vision and strategy that builds upon strong foundations in education, student experience and research, embracing flexibility and growth to ensure a sustainable future for our community, and to enable the University to strengthen its position and navigate these challenges successfully.

The School of Computing is a welcoming and diverse environment that has been recognised with a Bronze Athena SWAN award. Our staff and students come from all over the world, and we are proud of our friendly and inclusive culture. We support colleagues through a number of family-friendly policies, including a core hours policy and the right to apply for flexible working, and support for staff returning from periods of extended absence (for example, parental leaves).

The School of Computing will provide comprehensive support to all successful candidates, enabling the attainment and continuation of excellence in research, education and institutional citizenship. Early career researchers are given reduced teaching and

¹ Line Manager may be subject to change and will be confirmed in the employment contract issued to the successful candidate.
Senior Lecturer / Lecturer in Cyber Security
School of Computing

administrative responsibilities to enable them to undertake a PGCHE or equivalent (if not already obtained) and to build up research momentum.

Cyber Security is one of the strategic research areas of the University of Kent, as part of its Kent 2025 Strategy. Represented by research activities within the university-wide Institute of Cyber Security for Society (iCSS), the University of Kent has been recognised as an Academic Centre of Excellence in Cyber Security Research (ACE-CSR) by the National Cyber Security Centre (NCSC, part of the GCHQ) and EPSRC, twice since 2015 (first from 2015 to 2017 and then from 2018 until 2023).

The Role

The School of Computing is seeking to appoint two Lecturers / Senior Lecturers, based in the Cyber Security research group at our Canterbury campus. The appointees will help us to further grow our excellent research profile in cyber security, building on our success in the REF 2021 exercise in which 96.3% of our outputs are classified as world-leading or internationally excellent.

We invite applications from candidates with research interests that can complement or enhance the existing research strengths at the School’s Cyber Security research group and the cross-school institute iCSS. We welcome candidates whose research can be categorised as cyber security related, including but not limited to the following research themes and topics: socio-technical security and privacy, authentication and authorisation, communication and network security, security testing and software verification, AI and security (both AI for security/privacy/resilience/trust and security/privacy/resilience/trustworthiness of AI), digital forensics and online harms, information hiding and (post-)quantum cyber security. We are particularly interested in encouraging applicants who are working on topics falling in the following strategic areas which we hope to grow further in the next 5-10 years:

- **Interdisciplinary** research topics that can help strengthen collaboration with other academic schools of the University in **social sciences and humanities**, including but not limited to Politics and International Relations, Law, Psychology, Criminology and Sociology, Business and Management, Economics and Finance, Art and Design, Communication and Media, and Linguistics.

- Cyber security research that can support digital and data economy in **key industrial sectors** such as health and medicine, cultural and creative industries, transport / mobility / e-tourism / automotive, banking / finance / insurance, education, journalism and media.

- Cyber security research that can lead to wider **societal impacts** and/or advanced **industrial innovations** in important areas such as privacy protection, detection of cyber fraud and online false information, protecting citizens online, cyber security and online safety education / learning / awareness, malware, cyber threat intelligence, digital forensics, incident management, and digital assets.
Cyber security research that can help further strengthen the School of Computing and iCSS's collaboration with other university-wide research institutes, centres and networks, particularly in the areas of digital health, digital culture, digital humanity, creative technologies, smart transport and mobility, migration and movement, and environment protection and sustainability.

In addition, the successful candidates are expected to make significant contributions to teaching at all levels, including teaching cyber security modules that cover socio-technical topics such as network and system security, mobile and web security, information security management, privacy, digital forensics, and cyber law.

Full details about teaching and research in the School of Computing can be found at https://www.kent.ac.uk/computing/. Full details about activities of iCSS can be found at https://cyber.kent.ac.uk/.

About you

- **Senior Lecturer**: looking to build on your research achievements by joining an internationally renowned school with the opportunity to benefit from support to advance your research trajectory. You will have considerable experience of publishing high quality research and will relish the opportunity to make a dynamic contribution to our undergraduate, postgraduate and PhD programmes.
- **Lecturer**: looking for a high-quality academic environment in which you can develop your research, networks, publications, funding capacity and impact. You will have demonstrable experience of teaching and a passion to pursue research-led teaching of undergraduate and postgraduate and PhD programmes.

**Key Accountabilities / Primary Responsibilities**

- Undertake teaching of both undergraduate and postgraduate students, including the development of new modules and providing support for student learning.
- Develop and extend your existing successful research career, writing research papers of the highest quality and securing external funding.
- Collaborate with colleagues in the School on course development, delivery and assessment, taking on appropriate management and administrative responsibilities.
- Be an active part of iCSS to support a wide range of activities including but not limited to research, education, innovation, and wider engagement.

**Key Duties**

**Teaching**

- Deliver teaching to achieve the highest standards of student experience in a variety of settings from small tutorial groups to large lectures.
- Develop excellent teaching and learning support material across a range of modules.
Senior Lecturer / Lecturer in Cyber Security
School of Computing

- Set and mark assessments and examinations, providing timely feedback to students in a way that helps them develop their knowledge and skills.
- Supervise undergraduate and postgraduate students undertaking project work.
- Collaborate with academic colleagues on course delivery, development and curriculum changes.
- Provide pastoral support to students.
- Contribute to a wide range of cyber security education activities of iCSS including school outreach and cyber security education of staff and students.
- For this post we are particularly interested in candidates with expertise in Penetration Testing or Ethical Hacking.

**Research and Innovation**

- Undertake research of the highest quality within the School of Computing to enhance the University’s next REF submission.
- Support further development of iCSS to maintain its excellence in cyber security research.
- Generate funding to sustain your research from appropriate external sources such as UKRI and other funding bodies.
- Build a research programme with research students and post-doctoral researchers.
- Publish in leading journals and conferences in the wider cyber security field.
- Exploit opportunities to engage with industrial, commercial, governmental and charitable organisations to gain innovation funding, transfer knowledge and create impact.
- Develop collaborations with colleagues nationally and internationally to enhance research opportunities.

**Continuous Professional Development**

- Take on appropriate administrative and management responsibilities.
- Develop further skills in, and knowledge of, teaching methods and techniques.
- Such other duties, commensurate with the grading of the post that may be assigned by the Head of School or their nominee.

**Health, Safety & Wellbeing Considerations**

This role involves undertaking duties which include the Health, Safety and wellbeing issues outlined below. Please be aware of these, when considering your suitability for the role.

- Regular use of Screen Display Equipment

**Internal & External Relationships**

**Internal**: School of Computing, iCSS and wider university staff (academic and professional) and students.

**External**: Funding bodies, potential research and enterprise partners, research colleagues, professional bodies and prospective students and their families.
Person specification

The person specification details the necessary skills, qualifications, experience or other attributes needed to carry out the job. Applications will be measured against the criteria published below.

Selection panels will be looking for clear evidence and examples in an application, or cover letter (where applicable), which back-up any assertions made in relation to each criterion.

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<tr>
<th>Qualifications / Training</th>
<th>Essential</th>
<th>Desirable</th>
<th>Assessed via*</th>
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<tr>
<td>First degree or equivalent in a relevant subject area</td>
<td>✓</td>
<td></td>
<td>A</td>
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<tr>
<td>PhD in a discipline relevant to Computer Science</td>
<td>✓</td>
<td></td>
<td>A</td>
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<td>A relevant teaching qualification (PGCHE)</td>
<td></td>
<td>✓</td>
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<tr>
<th>Experience / Knowledge</th>
<th>Essential</th>
<th>Desirable</th>
<th>Assessed via*</th>
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<tr>
<td><strong>Senior Lecturer:</strong> Considerable experience of teaching as well as a strong track record in module development and pedagogical innovation in the undergraduate or post graduate curriculum.</td>
<td>✓</td>
<td></td>
<td>A,I,T</td>
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<tr>
<td><strong>Lecturer:</strong> Demonstrable experience of enthusing and effectively engaging students in teaching at undergraduate or postgraduate level</td>
<td>✓</td>
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<td>A,I,T</td>
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<tr>
<td><strong>Senior Lecturer:</strong> A well-established national research reputation and a growing international reputation for excellence in research including a recent track record of publication in leading international journals or conferences in one or more areas related to cyber security</td>
<td>✓</td>
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<td>A,I</td>
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<td><strong>Lecturer:</strong> Evidence of high-quality research and a publishing record commensurate with career stage.</td>
<td>✓</td>
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<td>A,I</td>
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<td><strong>Senior Lecturer:</strong> Success in attracting funding for research, and demonstrable potential for major grant capture and/or working towards REF impact.</td>
<td>✓</td>
<td></td>
<td>A,I</td>
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<tr>
<td><strong>Lecturer:</strong> Experience of applying for external grant funding for research activities or projects.</td>
<td>✓</td>
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Knowledge of the UK higher education system ✓ A,I

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<th>Skills / Abilities</th>
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<th>Desirable</th>
<th>Assessed via*</th>
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<tr>
<td>Ability to make a strong contribution to the research undertaken in the School in an area relevant to the Cyber Security research group and iCSS</td>
<td>✓</td>
<td></td>
<td>A,I,T</td>
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<tr>
<td>Ability to effectively educate and address undergraduate and postgraduate students across a wide variety of computer science modules, especially modules of cyber security degree courses</td>
<td>✓</td>
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<tr>
<th>Additional Attributes</th>
<th>Essential</th>
<th>Desirable</th>
<th>Assessed via*</th>
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<tr>
<td>Willingness to contribute widely to teaching, administration and management as part of a team</td>
<td>✓</td>
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<td>A,I</td>
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<td>Good inter-personal communication skills</td>
<td>✓</td>
<td></td>
<td>I,T</td>
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*Criterion to be assessed via:  
A  = application form or CV/cover letter  
I  = interview questions  
T  = test or presentation at interview