

**JOB DESCRIPTION**

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| **Job Title** | **Cyber Range Platform Developer -**  **KTP Associate** |
| **School / Service** | **School of Architecture, Computing and Engineering** |
| **Grade and Salary Range** | **Grade E: £42,261 per annum, plus £2,000 per annum (training)** |
| **Location** | **Digital Safety Community Interest Company, County Durham** |
| **Responsible to** | **Academic Supervisor, Company supervisor** |
| **Liaison with** | **UEL Staff, UEL Research Support, Research External Partners** |
| **Contract type** | **Fixed term contract (25 Months), Full time, 35 hours per week.** |

Build your career, follow your passion, be inspired by our environment of success **#BeTheChange**

**THE UNIVERSITY OF EAST LONDON**

If you are seeking a career that combines innovative education with a passion for crafting positive change, look no further than the University of East London. Founded in 1898 to meet the skills needs of the 2nd industrial revolution, we’re now in Year 5 of our ground-breaking 10-year Vision 2028 strategic plan, orchestrated by our Vice-Chancellor and President, Professor Amanda Broderick.

Our goal is to advance industry 5.0 careers-first education and provide a clear path to the jobs and opportunities of the future. We are committed to driving diversity in the 5.0 talent pipeline, working in partnership to promote talent wherever it is found and creating a sustainable, inclusive, and green future.

But we can't achieve this goal alone. We need forward-thinking, innovative, and curious individuals like you to join our community and help us shape the future. As part of our team, you'll have the opportunity to work with a diverse range of people who share your passion for generating positive change. We’re an inclusive and welcoming community that is constantly moving forward, never satisfied with the status quo.

If you're ready to join a team that values your outstanding skills and perspectives and is dedicated to making a difference, we invite you to explore a career with us. We are excited to welcome versatile individuals who are committed to advancing their careers while making a positive impact on the world.

**THE DEPARTMENT (School of Architecture, Computing and Engineering-ACE)**

Want to be part of a pioneering, forward-thinking, vibrant, and diverse environment with state-of-the-art facilities, where the focus is as much on providing world-class research as it is a transformational educational experience? Then make the move to The School of Architecture, Computing and Engineering (ACE).

We’re part of the University of East London - a well-established University that’s proud of its base and connections to the East End of London, but equally excited by the work it has embraced and is delivering in a global context. Recently awarded a silver rating in the Teaching Excellence Framework (TEF) 2023, the University is now just one category away from going gold.

ACE has played its part in the University’s success by growing its student numbers from 1,800 to 5,000 in the past five years alone - and they are keen to grow even further. A massive reason for ACE’s rapid growth is a unique teaching practice that involves applying design methodologies and advanced technologies to real-life scenarios in architecture, arts, computing, and engineering. Indeed, we’ve designed and refined courses that are careers-led and prepare students for a vastly changing technological future. We’ve also built an extensive industry network and worked with over 2,500 companies, including major employers like Siemens, Nissan, Ford, TfL, and Mott MacDonald, as well as professional institutions like RIBA, BCS, ICE, IStructE, CIHT, IHT, PWI, CIOB, CIAT, LI and IMechE.

**Job outline:** To develop a Cyber Range, this will include a realistic and scalable environment that simulate various cyber threats and scenarios, including policy and disaster recovery plans to enable businesses and communities to develop advanced decision-making and cyber security models. This role requires a deep understanding of cybersecurity principles, hands-on technical expertise, and a passion for innovation in the realm of cyber defence.

**About** **KTP:** A KTP (Knowledge Transfer Partnership) is a collaboration between a university and company, jointly funded by the Company and Innovate UK.

This KTP is a 25 month’ project between University of East London (UEL) and Digital Safety Community Interest Company. KTPs aim to help businesses improve their competitiveness and productivity through the better use of knowledge, technology and skills that reside within the UK Knowledge Base.

The KTP Associate will be based primarily at the Company premises in County Durham but will also spend some time at University of East London (UEL).

**About the Company:** At Digital Safety Community, we are driven to make the world a more digitally safe place for all. Building capabilities, research and development through bold conferences, original styling, purposeful research and a genuine passion from the team to do good.

DSC HQ is located Lambton Park in the heart of Durham, DSC is also partnered with several sustainable businesses looking at Digital Safety and the circular economy. DSC also works with several academics, behavioural scientists and industrialist from all sectors.

The DSC team are a mixture of strategic leaders from policing, academia, and technology experts who have come together to use the vast experience in support of the digital safety agenda.

**Project outline:** This is a 25 month’ KTP project between UEL and DSC to develop and implement a cyber range simulation platform to produce an operations and intelligence decision-making models and policy against adversarial cyber-attacks in all forms against individuals, businesses and communities. A more science-based approach will be taken and where possible up to date data provided to ensure the latest threat vectors are captured. The design of the platform will also include a requirement to ensure to “leverage academic research to achieve business objectives to show the value” and “create a new business asset for real-world impact.” Allowing production planning, promotional spend and marketing strategy for the organisation.

We are looking for an associate with a strong background in computer science and cyber security.

The project will involve travel between Durham and London, as well as travel to other stakeholder sites as appropriate.

**Job Purpose**

The KTP Associate will:

* Study the market in which DSC operates in and establish market opportunity for the project.
* Establish the macro socio and economic factors that should be considered in the Cyber Range
* Produce reports to senior management team.
* Provide training materials/workshops to existing staff as necessary.
* Contribute to academic research/conference papers for UEL.
* Collaborate with academic and industry partners to understand the requirements for developing a cutting-edge Cyber Range platform.
* Design, develop, and implement a robust and scalable cyber range infrastructure to simulate real-world cyber threats and scenarios.
* Work closely with cybersecurity experts to identify key features and functionalities required for effective cybersecurity training and testing.
* Conduct research & development on the latest trends and technologies in cybersecurity to ensure the platform stays at the forefront of industry standards.
* Customize and integrate existing cybersecurity tools and technologies into the Cyber Range platform to enhance its capabilities.
* Provide technical expertise and support to end-users for effective utilization of the Cyber Range platform.
* Collaborate with project stakeholders to ensure the successful delivery of project objectives within specified timelines.
* Document the development process, including code documentation, technical specifications, and user manuals.

**KEY DUTIES AND RESPONSIBILITIES**

The following duties and responsibilities are intended to give a broad indication of the variety of tasks that a KTP Associate may be expected to undertake. These duties may vary from time to time without changing the general character or level of responsibility entailed.

* Carry out the KTP project tasks and deliver the outcomes as outlined in the project plan.
* Manage the project and disseminate the findings to the project team.
* Undertake KTP management training, as well as other courses as deemed necessary.
* Write reports, and present these at the Local Management Committee (LMC) meetings, as well as at national conferences and symposia with other members of the project team.
* Prepare research papers for publication in highly acclaimed learned journals, in line with the expected scholarly activities of the University Research staff, but in accordance with the commercial sensitivity of collaborating companies.
* Travel to Company clientele and to various other locations within the UK, and possibly overseas, as required.
* To undertake such other duties as may be reasonably requested and that are commensurate with the nature and grade of the post.

**Other duties**

* All staff are therefore required to adhere to the University’s Health, Safety and Environmental Policy & Procedures
* Work within the University’s equal opportunities policies and procedure and actively promote equality, diversity and inclusion

**PERSON SPECIFCATION**

**KNOWLEDGE, SKILLS, AND EXPERIENCE**

Essential

* Strong programming skills, with experience in languages such as Python, Java, or C++. (A)
* Familiarity with cybersecurity concepts, tools, and methodologies. (A/I)
* Experience in developing and maintaining complex software systems. (A/I)
* Knowledge of cloud computing platforms and virtualization technologies. (A)
* Understanding of network security principles and protocols. (A/I)

Desirable

* Cyber Security - knowledge of networking protocols, cyber-attack vectors, and defensive strategies (I)

**COMPETENCIES REQUIRED**

Essential

* Excellent presentation skills (A/I)
* Ability to work both independently, without supervision, and, as part of a team (A/I)
* Effective communication skills including
* ability to communicate with a wide range of academic and commercial personnel (A/I)
* ability to convey technical information to non-technical stakeholders. (A/I)
* Excellent technical writing skills (A/I)
* Experience of working on own initiative and in a multidisciplinary team within a varying environment (I)
* Excellent problem-solving skills and the ability to work independently or as part of a team. (A/I)
* Ability to work at senior levels within business and public sector (A/I)
* Able to observe the University Equal Opportunities policies (A/I)

Desirable

* Licenced to drive in the UK (I)

**EDUCATION, QUALIFICATIONS AND ACHIEVEMENTS**

Essential

* MSc in Cyber Security or closely allied discipline (A)
* To undertake KTP training modules and other training as appropriate including leadership training (I)

UEL is an inclusive equal opportunities employer and are proud of our Equality, Diversity and Inclusivity achievements. We expect all employees of UEL to accept our EDI policy and will not tolerate discrimination in any form. As an employee of UEL, we expect you to follow all relevant Health & Safety policies.

We're a disability confident employer and value all applications. Please let us know if you require any reasonable accommodations throughout the recruitment process.

So, if you’d like to take your career to the next level with us here at the University of East London and are passionate about our environment and commit to success, we want you to apply today!

**Criteria tested by Key:** A = Application form C = Certification I = Interview T = Test including presentation