

JOB DESCRIPTION

Job Title:	CoSTAR Software Developer (Prototyping)
Department / Unit:	Department of StoryFutures
Job type	Technical – Professional Services
Grade:	RHUL 7
Accountable to:	Director of Technology, CoSTAR National Lab & StoryFutures Head of Technology
Accountable for:	N/A
Purpose of the Post	
<p>The postholder will be working with colleagues to develop effective software and tools to produce pilots and prototypes in areas related to emerging creative technologies. As a Software Developer in our team, you will ensure high quality code is delivered in line with project goals and delivery cycles.</p> <p>The team will be developing applications in areas such as AI & Machine Learning; games & 3D development; immersive experiences such as augmented and virtual reality; advanced production technologies such as Virtual Production, Extended Reality; Live entertainment.</p>	
Key Tasks	
<p>Software Development:</p> <ul style="list-style-type: none"> • Develop effective software that meets given specifications. • Review and give feedback on others' code. • Write tests using automated test-driven techniques to ensure code quality. • Integrate the software with monitoring and support tools where appropriate. • Support system integration in its operating environment. • Write and review technical documentation. • Help troubleshoot and resolve issues throughout the life cycle. • Participate in the team's agile planning and delivery process. • Contribute to the team's software development methodologies, such as pairing, code and documentation reviewing, and continuous delivery. 	
<p>Research:</p> <ul style="list-style-type: none"> • Working with CoSTAR Head of Innovation and the CoSTAR Inclusion, Standards and Software Capability lead alongside the core team members to shape the ideas that can be resolved using piloting and prototyping techniques. • Research and develop understanding in use of open source and open standard technologies relevant to CoSTAR objectives. 	

<ul style="list-style-type: none"> • Continue to learn new technologies and keep informed of advancements of existing technologies. • Communicate relevant developments, findings and recommendations in a manner appropriate and effective to the intended audience in university or industry context.
<p>Team Working:</p> <ul style="list-style-type: none"> • Contribute to an inclusive and sustainability-aware culture of active staff engagement within the CoSTAR National Lab, across all partners. • Work with colleagues in the Prototyping Team within the CoSTAR National Lab to develop a culture of excellence, promoting innovation, team-working, and collaboration. • Provide continuous engagement with relevant creative industries partners, helping develop new partnerships and impact activities. • Participates in departmental hack days and external ad-hoc events (typically 5 to 20 members).
<p>Other Duties</p> <p>The duties listed are not exhaustive and may be varied from time to time as dictated by the changing needs of the CoSTAR National Lab / University. The post holder will be expected to undertake other duties as appropriate and as requested by their manager.</p> <p>The post holder may be required to work at any of the locations at which the business of CoSTAR National Lab / Royal Holloway is conducted. There is the potential for out-of-hours support for key CoSTAR National Lab events as required.</p>
<p>Internal and external relationships</p> <p>The following list is not exhaustive, but the post holder may be required to liaise with some of the following:</p> <ul style="list-style-type: none"> • Director of Technology, CoSTAR and StoryFutures. • StoryFutures Technical and Producer staff. • StoryFutures academic staff, particularly research staff and visiting partners. • Creative Producers, developers and technologists from CoSTAR industry partners. • CoSTAR consortium partners, including University of Surrey, Abertay University, National Film & Television School, disguise, BT, and Pinewood. • External Project Partners – Other universities and private sector partners. • Industrial parties. • Computer Science Centre and other departments, particularly in Professional Services (IT, Facilities)

PERSON SPECIFICATION

Details on the qualifications, experience, skills, knowledge and abilities that are needed to fulfil this role are set out below.

Job Title: CoSTAR Software Developer (Prototyping)

Department: StoryFutures

	Essential	Desirable	Tested by Application Form/Interview/Test
Knowledge, Education, Qualifications and Training			
Educated to degree level in a relevant field (or evidence of equivalent applied Software development experience).	X		Application form
Strong knowledge of the state-of-the-art in software development and of innovation in the discipline.	X		Interview
Detailed knowledge of one or more technical areas of relevance to current projects in CoSTAR, with regard to Creative technologies, Media, Games and / or the creative arts.		X	Application Form / Interview
Skills and/ or Abilities			
Develop Software: Demonstratable ability to use a range of programming languages to develop software applications appropriate for creative industries.	X		Application form / Interview
Engineering: An aspiration for engineering excellence, using knowledge sharing to learn from each other.	X		Interview
Problem Solving: The ability to access and analyse information to define issues and identify appropriate solutions.	X		Interview
Leadership of self and others: The ability to motivate, inspire and develop yourself	X		Interview
Planning & Organising: Strong organisational skills and ability to multitask on a wide range of projects and ongoing deadlines. Able to effectively manage own workload.	X		Application Form / Interview
Resilience: The ability to maintain personal effectiveness in the face of pressure, setbacks or when dealing with challenging situations.	X		Interview

Communication: The ability to effectively listen, understand and convey messages in a way that is appropriate to the audience with good written and oral communication skills.	X		Interview
Flexibility (adaptability): The ability to respond positively to change.	X		Interview
Transfer: The ability to create transferable assets which can make an impact in CoSTAR and/ or wider industry.		X	Interview
Experience			
Software Expertise: Experience of one or more of the following software languages: Java, Python, C/C++, and JavaScript. Knowledge of databases.	X		Application form
Software Expertise: Experience of developing software in cloud-based environments, like AWS or Azure. Experience with Docker/Kubernetes. Knowledge of the MEAN stack, or similar.		X	Application form
Development Expertise: Solid understanding of software development principles, design patterns and best practices. Consistent usage of Git, or another versioning system.	X		Interview
Development Expertise: Experience with the end-to-end software development lifecycle (SDLC), including requirements gathering, design, development, testing, deployment and maintenance preferably using an Agile framework such as Scrum.	X		Application Form
Development Expertise: Knowledge of writing automated tests and undertaking Test Driven Development (TDD) or Continuous Integration (CI) approach to your work.		X	Application Form / Interview
Domain Expertise: A keen interest in emerging technologies, research, and innovation e.g. XR (Mixed Reality), VR (Virtual Reality), AR (Augmented Reality), Realtime technologies (Virtual Production), AI (Artificial Intelligence).		X	Application Form/ Interview
Other requirements			
A commitment to continuous personal development related to pursuing the state-of-the-art in software engineering.	X		Interview
Commitment to equality, diversity, inclusion, and sustainability in the workplace	X		Interview