	Last Updated: 5/01/2026		
Job Title	AI Research Software Engineer		
Faculty/ Department	Comp Sci & Elec Eng	**Legal Entity**	University of Surrey
Job Family	Professional Services	**Job Level**	L04
Reports To	Professor Adrian Hilton, Surrey CoSTAR Creative AI or Surrey leadership team delegate.	**Line Manages (role title(s))**	No line management responsibilities

Job Statement

Onboard and offer continuous support to University of Surrey researchers and project partners to utilise the CoSTAR AI Compute. Help shape and maintain documentation and training materials for the cluster. Develop & train AI tools.

Key Responsibilities This is not designed to be a list of all tasks undertaken but the main responsibilities (5 to 8 maximum)

1. Supporting CoSTAR R&D activities including the planning and carrying out of specific activities, often in collaboration with colleagues and partners.
2. Supporting onboarding and troubleshooting activities for CoSTAR AI compute as well as gathering feedback from users.
3. Developing and maintaining key documentation and training materials for the CoSTAR AI Compute infrastructure in collaboration with the wider Surrey Research Computing Services team.
4. Delivering training sessions for CoSTAR compute users both locally and online.
5. Leading and collaborating with the CoSTAR Creative AI team, partner Universities and industry across on joint research, development and integration to develop new tools and technologies.
6. Supporting CoSTAR industry partners in using the CoSTAR AI compute and the development of AI models and applications.
7. Undertake liaison with external organisations including equipment manufacturers, steering committees, associated academic facilities and commercial users.
8. Maintaining links to the central RSE team and ensure sharing of best practice and knowledge within the Surrey RSE community.

N.B. The above list is not exhaustive.

Role Scope and Impact This is a summary of the post holder's role in delivering outcomes, making decisions, and the complexity of problem-solving involved in the role.

1. The post holder will follow established guidance with freedom to make decisions within defined boundaries. Decisions outside these parameters will require approval from their manager or senior members of the CoSTAR Creative AI team.

2. The post holder will operate with clear procedures, and most tasks are operational in nature and heavily guided by established protocols. The post holder is expected to contribute to improving existing procedures in collaboration with colleges and support in developing new processes where needed.

Supplementary Information

- The post holder is expected to be available to participate in fieldwork as required by the specified research project.
- The post holder has no budgetary responsibility.
- The post holder will interact with a large cohort of students, academic staff and industry partners.

Person Specification This section describes the knowledge, experience & competence required by the post holder that is necessary for standard acceptable performance in carrying out this role.

Qualifications and Professional Memberships	

The post holder must have a Master's degree in computer science, electronic engineering, or a related subject. A strong background in software development and experience in one or more of the following areas is essential:		
Technical Competencies (Experience and Knowledge) This section contains the level of competency required to carry out the role (please refer to the Competency Framework for clarification where needed and the Job Matching Guidance). Level 1: basic level of understanding/experience and can apply it with guidance. Level 2: good level of understanding/experience and can apply it with little or no guidance. Level 3: expert level of understanding/experience and can apply, develop it and guide others.	**Essential/ Desirable**	**Level 1-3**
Experience in software development in topics such as computer vision, audio signal processing, machine learning, deep learning, and/or sensor systems.	E	3
Experience in collaboration and technology transfer to partners outside of academia.	E	2
Excellent writing and communication for varying levels of technical/non-technical audience.	E	3
Skills and experience of development using languages such as Python and C++ with relevant computer vision, signal processing, machine learning and/or deep learning tools (TensorFlow, PyTorch, Keras, OpenCV etc.).	D	2
A track record of publishing academic papers, open-source software tools and/or datasets.	D	1
Core Competencies This section contains the level of competency required to carry out this role. (Please refer to the competency framework for clarification where needed). n/a (not applicable) should be placed, where the competency is not a requirement of the grade.		**Level 1-3**
Communication		3
Adaptability and Flexibility		3
Customer, Client service and support		2
Planning and Organising		2
Continuous Improvement		2
Problem Solving and Decision Making Skills		3
Managing and Developing Performance		1
Creative and Analytical Thinking		1
Influencing, Persuasion and Negotiation Skills		1
Strategic Thinking and Leadership		1

This Job Purpose outlines the core activities of the role. As the Department/Faculty and the post holder evolve, the duties and focus of the role may change. The University expects the post holder to adopt a flexible approach to work, including undertaking relevant training when necessary. If significant changes to the Job Purpose are required, the post holder will be consulted, and the changes will be reflected in a revised Job Purpose.

All staff are expected to:

- Positively support equality of opportunity and equity of treatment to colleagues and students in accordance with the University of Surrey Equal Opportunities Policy.
- Work to achieve the aims of our Environmental Policy and promote awareness to colleagues and students.
- Follow University/departmental policies and working practices in ensuring that no breaches of information security result from their actions.
- Contribute towards broader university initiatives that have a positive impact on student experience, recruitment and campus operations. This may include participation in cross-functional activities such as open days, confirmation and clearing, welcome week, graduation.
- Ensure they are aware of and abide by all relevant University Regulations and Policies relevant to the role.
- Undertake such other duties within the scope of the post as may be requested by your Manager.
- Work supportively with colleagues, operating in a collegiate manner at all times.

Help maintain a safe working environment by:

- All staff have a statutory responsibility to take reasonable care of themselves and others and to prevent harm by their acts or omissions. All staff are, therefore, required to adhere to the University's Our Safety Policy Statement and associated Procedures.

Organisational/Departmental Information & Key Relationships

Background Information

This post is part of an AHRC project, Convergent screen technologies and performance in realtime (CoSTAR). **The post will operate within the CoSTAR National Lab** led by Royal Holloway University of London with Pinewood Studios, BT, University of Surrey, Abertay University, Disguise, National Film and Television School and Surrey County Council.

The **CoSTAR National Lab will enable** small and medium businesses (SMEs) and wider industry to do what they could not do alone by:

- building, commissioning, testing and demonstrating the facilities of the CoSTAR National Lab in Applied Research, enabling early stage research to experimental prototyping
- placing applied research side-by-side with live commercial productions, with a network of industry leaders offering routes to commercialisation and markets beyond most SME networks
- providing unique access to world-leading creative businesses and talent to stimulate feedback between creative technology research and development (R&D) and commercial and creative exploitation
- fusing R&D with production expertise and industry via the UK's National Film and Television School, the world's leading film school, coupled with research-in-action PhD programmes

The National Lab will also deliver a Knowledge Exchange and Commercialisation Function and a Pilots, Demonstrators and Trials programme on behalf of the CoSTAR network.

The National Lab will include dedicated stage and studio space, featuring advanced creative computing technologies, a large-scale virtual production system, a 5G-6G private network, a motion capture rig, and a state-of-the-art creative artificial intelligence (AI) compute facility accessible across the UK. Its networked facilities will provide access to the nationwide CoSTAR infrastructure.

Find out more about the CoSTAR programme.

Centre for Vision Speech and Signal Processing (CVSSP) at the University of Surrey

The Centre for Vision, Speech and Signal Processing (CVSSP), part of the Department of Electronic and Electrical Engineering at the University of Surrey, is an International Centre of Excellence for research in Audio-Visual AI and Machine Perception, with 180 researchers, a grant portfolio of £30M (£21M EPSRC) from EPSRC, EU, InnovateUK, charity and industry, and a turnover of £7M/annum. The Centre is internationally unique in bringing together expertise in both audio and visual machine perception, with the central goal of creating machines that can see and hear to understand the world around them. The Centre has state-of-the-art multi-camera UltraHD visual and spatial audio capture and analysis facilities supporting research in real-time audio-visual processing and visualisation. CVSSP has an AI compute facility with 240GPUs for deep learning and >1PB of high-speed secure storage. National standing is evidenced by sustained EPSRC investment, including two Programme Grants (2013-19, 2015-21), Prosperity Partnership(2021-25), Digital Economy Centre DECaDE (2020-25), three Platform Grants in Audio-Visual Research (2003-08, 2008-14, 2017-22), and as a lead partner of the BBC Data Science and Audio Research partnerships. The centre has an outstanding track record of pioneering research leading to successful technology transfer with UK industry and spin-out companies. CVSSP also leads the AI@Surrey interdisciplinary network of over 300 research in AI and machine learning across the University of Surrey.

Project partners

- Royal Holloway University of London, Pinewood Studios, BT, Abertay University, Disguise, National Film and Television School, Surrey County Council

Department Structure Chart