

Professor of Creative Technologies (and StoryFutures, Director of Technology)



Candidate pack



# **Key facts**

- Royal Holloway is currently ranked in the top 30 in the UK in the Times and Sunday Times Good University Guide, 2023. We are also ranked in the top 400 in the world and 41st overall in the UK in the Times Higher Education (THE) World University Rankings 2023. In its category 'International Outlook', Royal Holloway is ranked in the UK's top 40 universities.
- Royal Holloway sits within the top 25% of universities in the UK for research rated 'worldleading' or 'internationally excellent' by the Research Excellence Framework (REF) 2021.
- The National Student Survey (NSS) 2022 revealed that Royal Holloway, with a rating of 79%, remains above the sector average.
- Our world-leading researchers continue to address global challenges, including the development of treatments and therapies for rare diseases and lifelimiting conditions, the rapid decline of bees and protecting the UK's national infrastructure from cyber-attack.
- Recognised as world-class experts in the arts, humanities and sciences, many Royal Holloway academics act as advisors to policy-makers and the Government on a wide range of issues, such as combating radicalisation and terrorism.

- Royal Holloway has a total of 11,844 students (FTE, at December 2022). Of these 9,421 are from the UK, 601 are from the EU and 2,002 are from further afield internationally. We currently have 9,943 undergraduates, 1,308 postgraduate taught and 595 postgraduate research students.
- In addition to the main campus in Egham, Surrey we also have a growing campus at Bedford Square in central London where over 300 of our postgraduate students are taught.
- We have 1,671 FTE of staff working at Royal Holloway across academic, professional services and support areas.
- Royal Holloway has an annual income of around £201 million (2021/22). We estimate that in the same year, we contributed c.£657.1m to the UK economy\*.
- There are over 95,000 alumni of Bedford College, Royal Holloway College and Royal Holloway and Bedford New College worldwide. Notable alumni include novelist George Eliot, suffragette Emily Davison, the first woman doctor in the west Dr Elizabeth Blackwell, actor Mark Strong, EU Foreign Minister Baroness Cathy Ashton, writer, actor and campaigner Sir Lenny Henry, and Paralympic triple gold medallist Sophie Christiansen.

\*Biggar Economics



# Our strategic plan, 2021-2024

We have a bold vision for Royal Holloway's future and a clear strategy for how to make this happen.

The strategic plan considers how we can meet the needs of our modern times in terms of the provision of higher education and research based innovation. By building on our well regarded academic strengths, and by aligning to needs, for example in graduate employability, programme portfolio, access, civic influence, partnership and knowledge exchange, we can deliver on our purpose as a university.

Our three year strategic plan, covering 2021 to 2024, was inspired by the Deed of Foundation which established Royal Holloway College in 1896. Royal Holloway College merged with Bedford College in 1985, providing the foundations of the university we are today.

Our strategic plan has three strategic priority pillars:

- Respond to the higher education needs and ambitions of an expanding London population.
- Build strong and sustainable international partnerships that expand the horizons of all our students.
- Develop strengths in challenge-led research and contribute to addressing key issues of our modern time.

#### Vision for the future

Throughout the plan is a strong focus on managing our resources effectively and efficiently. In doing so we protect the legacy of our founders and enable Royal Holloway to meet the modern needs of future generations.

Equality, diversity and inclusion are a central part of our efforts to realise this future. As a university we are ambitious to cultivate an inclusive environment which supports excellence in teaching, research and student and colleague experience.



## Our strategic plan, 2021-2024

"The Founder believes that the education of women should not be exclusively regulated by the tradition and method of former ages; but that it should be founded on those studies and sciences which the experience of modern times has shown to be the most valuable, and the best adapted to meet the intellectual and social requirements of the students."

Deed of Foundation, 1883

Aligning to the opportunities and requirements of our modern times to address local and global needs

Strategic ambition

Respond to the higher education needs and ambitions of an expanding London population Build strong and sustainable international partnerships that expand the horizons of all our students Develop strengths in challenge-led research and contribute to addressing key issues of our modern time

Strategic priority pillars

Manage resources effectively and efficiently to ensure a financially sustainable future, creating value through and for our people.

#### Operational routes to delivery

Academic routes to delivery

Simplify and rationalise professional services / processes / procedures

Strengthen employability, inclusion, reasons for firm choice student recruitment

Strategy to action: academy and professional services

Maximise benefits of information technology and digitisation

Grow international experiences for our students

Relentless focus on service / continuous improvement / partnership working

Expand challenge-led research from investigator-led research basis

## CoSTAR National R&D Lab

StoryFutures, the UK's National Centre for Immersive Storytelling, has recently been announced as the new CoSTAR National R&D Lab for Creative Industries, a £51.1m investment by the UK Government to ensure the UK's screen and performance industries have the infrastructure and the skills to stay ahead.

By bringing together world leaders in technology, research and story, we will catalyse innovation for the UK's Creative Industries. Partnered with Pinewood Studios, BT, disguise and drawing on a huge network across the creative sector, the National Lab will place R&D at the heart of UK storytelling and storytelling at the heart of R&D. Our Lab will include large Stage and Studio space, featuring advanced creative computing technologies: a large-scale LED Volume, 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.

With Royal Holloway, University of London (RHUL) as lead organisation, our consortium brings together world-leading research teams from creative media production, psychology, business and drama at RHUL, AI at University of Surrey and Game Engines at Abertay University. Our consortium further includes Disguise and BT, spanning expertise in Virtual Production and Networked capability that will put the UK at the forefront of advanced computing technologies for the creative sector.

Our Lab will enable SMEs and industry to do what they could not do alone by:

- Providing unique access to world-leading talent from across the creative industries, such as our previous partnerships with David Olusoga, Asif Kapadia, Jayde Adams and Georgina Campbell
- Placing Equality, Diversity and Sustainability at the heart of all we do: ensuring over 30% of users having global majority senior leads by 2029, with 40% of innovation projects focused on these areas.
- Fusing R&D with professional training, production expertise and an industry front-door at the UK's National Film and Television School, the world's leading film school, coupled with research-in-action PhD programmes.
- Working internationally, to build on successful partnerships with China, Canada and the US to enable UK research and creative sectors to build global networks.

We will create an innovation architecture to enable UK screen and performance sectors to lead the world in future waves of advanced computing technologies. We will do so by placing our nations' leading-edge advantage in storytelling IP at the core of the National Lab, providing a unique catalyst for innovation that is unmatched anywhere in the world.



# The role & purpose of post

Royal Holloway, University of London is committed to enabling high quality, impactful and inclusive research and education and to creating value through and for our people. In recognition of this, and our sector leadership in the area of creative industries a new Professorial post of Creative Technologies has been created: an exciting interdisciplinary role as a joint appointment between StoryFutures, the School of Engineering, Physical and Mathematical Sciences (EPMS); and the School of Performing and Digital Arts (PDA).

The postholder will provide leadership for research and development in creative technologies, ensuring that the opportunities of the StoryFutures and CoSTAR National Lab are integrated across all partners in the CoSTAR network and fully realised within both EPMS and PDA. They are expected to provide R&D and industry leadership for StoryFutures within the context of existing, and future, funding awards and the University's wider creative industries strategic plan and priorities.

As **StoryFutures Director of Technology**, the postholder will be responsible for setting and integrating technical vision within the strategies for StoryFutures and the CoSTAR National Lab.

The postholder will work across StoryFutures, EPMS, PDA, and the wider university community to realise the potential

for interdisciplinary research and education opportunities. Within StoryFutures they will work in collaboration with the Director of StoryFutures and StoryFutures Director of Operations to deliver effective R&D leadership, planning, resource allocation and management to ensure innovation and excellence in blue skies research as well as on closerto-market R&D and knowledge exchange. Within EPMS and PDA, the postholder will fulfil a leadership role in integrating creative technology opportunities into the portfolio of education delivery, student experience, staff training and upskilling, research, partnerships and knowledge exchange activities. Across their role, the postholder will develop and deliver world-leading industryfocused learning and skills development activities through curriculum design, teaching materials, and evaluating their impact on student learning and career development.



# Key tasks & areas of responsibility

## **External Engagement and Leadership**

To take leadership on the below areas within the StoryFutures National Lab, working with EPMS and PDA to ensure the benefits and opportunities of StoryFutures are fully realised in School research, knowledge exchange, impact and student strategies.

- Lead the strategic and technical vision for full-stack research and development of technology and design work in collaboration with StoryFutures leadership team, with a focus on cross-disciplinary and full stack integration.
- Contribute fully to StoryFutures, EPMS, PDA, Equality, Diversity and Inclusion (EDI) strategies and work to embed and drive these goals to create an inclusive and supportive working environment for all.
- Partner with leadership at CoSTAR Network Labs to ensure research and development strategies, data, pipelines, and opportunities are leveraged and amplified between RHUL, StoryFutures HEI partners, and the Network Labs.
- Develop and lead activities for academic staff across the University to engage within StoryFutures, including effective representation of staff research and development capabilities into the design and delivery of EPMS and PDA programmes.
- Demonstrate and maintain substantial and significant networks within industry: business and professional bodies that provides ability to deliver strategic value for the University.

## **Professional Practice**

- Lead critical review processes for research projects in the national lab, developing and implementing review structures that span a variety of disciplines and research timelines.
- Supervise and mentor research and academic staff in professional contexts for delivery of large-scale creative industries projects.
- Lead substantial projects with external agencies, including those generating significant grant or commercial R&D income (cash, in-kind, facilities) for the University as a principal or co-investigator.
- Sit on Creative Industry Advisory Board(s)
- Instigate and engage in public forums, community
  meetings or links with business, health or government
  and policy groups, and educational and knowledge
  exchange collaborations with creative industry and
  international partners.



- Set and integrate technical vision within the strategies for StoryFutures and the CoSTAR National Lab, including architecture, working models, and collaboration across the full stack of research and engineering to invent the next generation of screen and live performance technology.
- Guide multi-institution technical priorities across the CoSTAR National Lab.

#### **Teaching**

- Contribute to growing and enhancing undergraduate and postgraduate provision to develop the existing and future workforce in the creative technologies
- Engage with students at all levels (undergraduate, postgraduate taught and doctoral), creating and enhancing industry-focused opportunities (including placements, internships, workshops, the delivery of creative industries projects, etc) to enhance employability
- Work with colleagues across disciplines in the continuous review and development of courses and the curriculum to ensure they meet current and future industry requirements
- Contribute to educational delivery across EPMS and PDA (e.g. project supervision, teaching and assessment) and contribute to the development of new, crossdisciplinary, programmes.
- Promote the use of innovative, accessible and inclusive methods and techniques in teaching, learning and assessment that meet the needs of a diverse range of learners
- Take an active role in the recruitment and supervision of doctoral students, educational and knowledge exchange collaborations with creative industry and international partners.

## **Line Management**

 Line Management of research, technical and academic staff, ensuring that a culture where diversity, inclusion and sustainability are embedded across all activities, in particular StoryFutures R&D strategies and projects.

#### **Other Duties**

The duties listed are not exhaustive and may be varied from time to time as dictated by the changing needs of the University. The post holder will be expected to undertake other duties as appropriate and as requested by their manager.

The post holder may be required to work outside of standard working hours on occasion, and to work at any of the locations at which the business of Royal Holloway is conducted.

The post holder may be asked to deputise for the Director of StoryFutures.

Represent the University to the outside world, to further the University's interests and secure its objectives

Promote and maintain equality of opportunity and diversity with respect to both University staff, students, and external stakeholders

## **Internal and External Relationships**

The following list is not exhaustive, but the post holder will be required to liaise with:

#### Internal:

StoryFutures Management Team; Executive Deans of EPMS and PDA; Heads of Department for Computer Science and Media Arts; Associate Pro-Vice Chancellors for Research and Innovation, Partnerships and External Collaboration, Postgraduate Research; School Vice Deans for Research, Education and Student Experience, Equality, Diversity and Inclusion; Members of the University Senior Leadership Team; College Professional Services Teams, including Research and Innovation, Finance, IT, HR, Marketing and Communication.

#### **External:**

National and international research colleagues and networks; schools and other educational stakeholders, the media, non-HEIs in the sector, governmental organisations and other possible outreach partners as appropriate, and Research Councils.



# **Person specification**

# Knowledge, Education, Qualifications and Training

- Educated to PhD level or equivalent experience
- Outstanding academic or industry track record with a demonstrable national or international profile and achievements of creative technology innovation commensurate with Professorial standing.
- Evidence of having driven a high quality, inclusive, interdisciplinary and collective research performance culture in an industry or HE context.
- Ability to navigate commercial and public funding contexts; experience running major research grants or projects with or within creative industries and/or the technology sector.
- Excellent knowledge of software development and research lifecycles and, from early speculative research to product implementation.
- Possession of a recognised teaching qualification (desirable)
- Doctorate in a relevant field or equivalent industry R&D experience (desirable)

## Skills and abilities

- Ability to define technical strategy, design goals, and lead large or linked teams through a technical roadmap, including designing and evaluating best practices for integrating and sharing code across institutions and companies.
- Strong project management skills; ability to adapt program structures to be fit-for-purpose in new contexts.
- Outstanding ability to work pro-actively, including both deputising and delegating
- Excellent interpersonal skills and emotional intelligence. Ability to communicate effectively with key colleagues and student communities and to create compelling narratives around institutional strategy and direction.
- Skilled in learning-based systems and data pipelines (desirable)
- Ability to contribute to curriculum design and educational programme development (desirable)
- Ability to co-ordinate and build relationships between Universities and Creative Industries (desirable)

## **Experience**

- Experience in research leadership, preferably with a cross-institutional and/or interdisciplinary aspect, with a proven commitment to EDI in an institutional or industry setting
- Industry experience building and leading distributed teams building technologies and products, preferably with integrated or partnered research teams in one or more of the following areas:
  - machine learning and computer vision; graphics programming, streaming, video codecs; audio DSP, streaming; game engine development; high performance/Realtime network technology; high performance video or audio production engineering; high performance game or CG production tools; VR/AR/immersive technology and experiences; open standards in codecs, networking,
- Experience developing strategy for the creative industries, translating that strategy into deliverable plans, and overseeing successful implementation and monitoring.
- Significant participation/investment in open standards or standards bodies (desirable)

#### Other requirements

 Evidence of having built strong networks and relationships at a national or international level in relation to research and in partnership with industry.



# How to apply

Please apply through Royal Holloway's online recruitment system at **jobs.royalholloway.ac.uk** by 9 October 2023.

1st interview: online, week of 23 October 2023

2nd interview: in-person at Egham, early November 2023

For an informal discussion about the role, please contact:

Professor James Bennett, Director, StoryFutures

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