Research Associate in UX Design for Game-Based Learning
Theatre, Film and Television

Closing date: 18 August 2019
Interview date: To be confirmed
Vacancy reference: 7795
INTRODUCTION

Digital Creativity Labs (DC Labs) at the University of York is a world centre of excellence in impact-driven games research. One branch of the research in DC Labs explores the possibilities of utilising games as a platform to help millions of people improve their STEM skills, such as data literacy, critical thinking and evidence-based reasoning. DC Labs are seeking a highly motivated individual with experience in UX design (ideally in the context of learning) to lead the research surrounding novel interactive experiences that leverage data from competitive online games (also known as esports) and other sources to engage millions of players in data analysis. The successful candidate will design, prototype and evaluate easy-to-use visualisation tools that engage video game players in data analysis, allowing them to observe, evaluate and improve their own experience and performance in the games while fostering transferable skills, in particular Data Literacy, which can empower users in other areas of their lives, including education and career development.

The individual will have the unique opportunity to make the products of their research available to millions of people, as well as to conduct large scale longitudinal user evaluation. The work is closely aligned with WEAVR (http://weavr.tv/), a £5.8m R&D consortium project that explores immersive new ways of engaging the 380m esports fans worldwide. WEAVR will provide key assets, including high fidelity data from commercial games and machine learning technology that helps users interpretation of esports data. On the industry side, WEAVR is lead by ESL (https://www.eslgaming.com/), the world’s largest independent esports company, which will provide exclusive access to leading domain experts, international events and millions of fans. This will create exciting opportunities for co-designing interactive experiences with and for the community to ensure relevance to the target audience. The successful candidate will also work closely with the National STEM Learning Centre (https://www.stem.org.uk/) to co-create and evaluate teaching materials.

The postholder will have a record of excellent research, reflected in high quality publications and will bring an appetite for innovation across discipline boundaries and application domains. Applicants will have good programming skills (e.g. C, C++, C#, Python, Java, Unity) accompanied by passion to develop applications that can be applied in real-world environments. The postholder will have the opportunity to develop their career in the lively and stimulating environment of Digital Creativity Labs, including taking part in inter-disciplinary research activities, (co) supervising interns and PhD students and taking training to enhance entrepreneurial skills.
Main purpose of the role

- To conduct research under the supervision of senior colleagues and to contribute to the production of research
- To assist in the identification and development of potential areas of research and the development of proposals for independent or collaborative research projects

Key responsibilities
(Role holders will be required to undertake some or all of the duties below)

- To conduct individual and collaborative research projects in user-experience design and develop user-focused applications. Duties include: analysis and interpretation of research data; use of appropriate research techniques and methods; writing up of research results and dissemination through publications, seminar and conference presentations and public engagement and outreach activities; contributing to the identification of possible new areas of research
- To build and maintain collaborations with the games industry and associated industries
- To undertake appropriate organisational and administrative activities connected to the research project, including conference organisation, and the development of promotional or educational material including website maintenance and development

Additional Role Responsibilities

- To develop and initiate collaborative working internally and externally, duties to include: the building of internal contacts and participation in internal networks; collaboration with colleagues on joint projects as required; participation in and identification of external networks in order to share information and identify potential opportunities for collaboration and possible sources of funding; attendance at and contribution to relevant meetings
- To provide guidance to other staff and students, as required, as well as coordinating the work of small research teams
- To assist with undergraduate teaching in own area of expertise.
- To contribute to the preparation of research proposals and applications to external bodies
- To collaborate with and grow a network of external organisations in conducting applied and translational research. The network will include digital games companies and partners in digital content production, which can incorporate research advances into the next generation of experiences around esports data and immersive technology, and organisations which can make use of user data to conduct social science and market research to engage their audiences.
- To engage and collaborate with research and researchers from other scientific disciplines in areas such as Game Analytics, Artificial Intelligence, Interactive Storytelling, Information Visualisation and Psychology.
- To achieve substantial economic, social and cultural impacts from research, principally by working with external partners.
- To work across disciplines and encourage a multidisciplinary perspective on research and impact, across the DC Labs and its partners, and across the wider University community.

JOB DESCRIPTION

At a glance

Salary £32,236—£39,609 a year

Hours of work Full time/37 hours a week

Contract type Fixed term/2 years

Based at Heslington Campus East
## PERSON SPECIFICATION

### Qualifications

**Essential / Desirable**

#### PhD in Computer Science, Human-Computer Interaction, Design, Data Science or other domain relevant to the position or equivalent experience

- **Essential**

### Knowledge

- **Essential**
  - Knowledge of research methodologies for user centered and user experience design and development

- **Desirable**
  - Knowledge of a range of data visualization techniques
  - Awareness of interactive technologies for learning

### Skills, abilities and competencies

- **Essential**
  - Ability to organize, conduct, and analyse the outcomes of research activities that facilitate the user-centered design and development of interactive experiences focused on learning
  - Ability to contribute to the development of functional software prototypes of interactive experiences (e.g. using C, C++, C#, Python, Java, Unity)
  - Ability to write up research work for publication in high profile journals and engage in public dissemination

- **Desirable**
  - Competency with frameworks for creating interactive data visualizations (e.g. D3.js)
  - Ability to supervise the work of others, such as MSc or PhD students
  - Ability to develop of interactive experiences for learning
## PERSON SPECIFICATION

<table>
<thead>
<tr>
<th>Experience</th>
<th>Essential / Desirable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience of applying R&amp;D methodologies for the user-centered design and development of interactive experiences</td>
<td>Essential</td>
</tr>
<tr>
<td>Experience of developing functional prototypes for deployment with users</td>
<td>Essential</td>
</tr>
<tr>
<td>Experience of carrying out independent and collaborative research, ideally in interdisciplinary teams that include academic and industry stakeholders</td>
<td>Essential</td>
</tr>
<tr>
<td>Experience of writing up research work for publication and dissemination</td>
<td>Essential</td>
</tr>
<tr>
<td>Experience of conducting research in or around digital games</td>
<td>Desirable</td>
</tr>
<tr>
<td>Experience of generating research impact, in particular through collaboration with industry</td>
<td>Desirable</td>
</tr>
<tr>
<td>Experience creating prototypes of learning games/experiences</td>
<td>Desirable</td>
</tr>
</tbody>
</table>

### Personal attributes

| Interest in and enthusiasm for conducting research in the esports & games sectors | Desirable |
| A team player with a collaborative approach, able to motivate and inspire others | Desirable |
| Positive attitude to colleagues, students and external stakeholders           | Desirable |
| Self-motivated, pro-active and innovative                                     | Desirable |
| Ability to plan and prioritize own work in order to meet deadlines             | Desirable |
| Commitment to personal development and updating of knowledge and skills       | Desirable |
| Flexible to travel to partner sites in the UK and international conferences   | Desirable |
| Attention to detail and commitment to high quality outputs                    | Desirable |
| Entrepreneurial nature                                                        | Desirable |
DIGITAL CREATIVITY LABS

Digital Creativity Labs (DC Labs) is a major (£18 million) investment by three UK research councils, four universities, and over 100 collaborative stakeholder organisations to create a world centre of excellence for impact-driven research in digital creativity, which launched in April 2016. DC Labs is focused on digital interaction and media convergence: digital games, interactive media and the rich space in between. In DC Labs researchers, industry, government, the third sector and the general public are co-creating the means for interaction and expression in the future digital society, jointly realising the huge potential of games and interactive media for economic, social and cultural impact.

DC Labs is housed in purpose-built space within the Ron Cooke Hub, a £20m environment for creative ideas that brings together world class interdisciplinary research (the York Centre for Complex Systems Analysis), the Intelligent Games and Game Intelligence (IGGI) Centre for Doctoral Training, the 3Sixty (a totally immersive large black box with 360 degree projection and sound) and a large 3-storey atrium space for discussion and collaboration. DC Labs achieves rich synergies with the co-located IGGI Centre for Doctoral Training (www.iggi.org.uk) with over 60 PhD students, and the recently funded £15m AHRC Creative Media Labs, which has funded opportunities for companies to collaborate with researchers, PhD students and undergraduates to exploit the potential of immersive and interactive technologies for storytelling. The Ron Cooke Hub is adjacent to the Departments of Computer Science and Theatre Film and Television, the leading Departments for the DC Labs, and is a few minutes' walk from the other collaborating Departments: Electronic Engineering, Archaeology, Sociology, Education and Psychology.

THE DEPARTMENT

Digital Creativity Labs

Established in 2006, the department of TFTV is a highly innovative department, which brings together research, teaching and commercial activities in the fields of interactive media, film, television and theatre. The department’s research is defined by these fields and their interconnections, with a number of major cross-cutting themes, including storytelling, interaction, performance, communication, and intermediality. The research combines technology innovation with practice-based enquiry, founded in theoretical and historical investigation. The Research Excellence Framework (REF) 2014 results ranked York’s TFTV department 15th overall in the UK in its sector in terms of research outputs, with 75% of its research being ranked world leading or internationally excellent. This is testimony to the quality of research in this young and rapidly developing department.

The department has excellent links with media and communication companies, such as BBC, BT, ITV, C4, Sony, with theatre companies including National Theatre, Royal
THE DEPARTMENT

Shakespeare Company, The Globe and York Theatre Royal, but also with various other cultural institutions and SMEs in media production and games. The department currently has 24 academic staff, 8 technicians, and a 13 staff making up the administrative and commercial team, as well as staff attached to specific externally funded projects. The academic staff includes both leading scholars and award-winning industry professionals and is expanding rapidly. There are currently some 460 students, with plans to expand to 500. The Department currently offers three undergraduate degrees and four taught postgraduate degrees, with further programmes under development, and has a thriving PhD programme.

The Department’s £30+ million award-winning building is designed to professional specifications and is one of the best-equipped facilities of its type in the UK. It incorporates two fully broadcast-compliant HD television studios with 3G infrastructure including links for OB trucks and provision for transmission uplink and downlink; a green screen studio overlaid with a high-definition marker-less motion capture system; postproduction laboratories with industry-standard tools and equipment for picture finishing and sound design; two dedicated audio labs; a 140-seat digital cinema with Dolby Digital-certified 7.1 and DTS sound as well as provision for satellite feeds; a 120-seat black box which also serves as a shooting stage and workshop space; a 200-seat thrust stage theatre (based on the Sheffield Crucible); two large rehearsal rooms (which can also be used as shooting stages); dressing rooms; workshops.
The University

Founded on principles of excellence, equality and opportunity for all, the University of York opened in 1963 with just 230 students. In 2019 it is the home of more than 18,000 students across more than 30 academic departments and research centres. Since opening over fifty years ago, we have become one of the world's leading universities and a member of the prestigious Russell Group.

We are consistently recognised as one of the leading Higher Education Institutes and one of just six post-war universities to have appeared in the world top 100. We were rated 22nd in the 2019 Times & Sunday Times league table. The University of York has won six Times Higher Education (THE) Awards and five Queen’s Anniversary Prizes.

The University is proud of its association with Athena SWAN, holding multiple awards in support of gender equality, representation and success for all, with gold awards for Chemistry and Biology and a University-wide bronze award.

Of 154 universities that took part in the Research Excellence Framework (REF) in 2014, The University of York ranked 14th overall and 10th for the impact of our research. The University is consistently in the top ten UK research universities and attracts over £60m a year of funding from research alone.

Our vision is to make the University of York a world leader in the creation of knowledge through fundamental and applied research, the sharing of knowledge by teaching students from varied backgrounds and the application of knowledge for the health, prosperity and well-being of people and society.
Attractive workplace

Centred around the picturesque village of Heslington on the edge of the city of York, our colleges are set in an attractive landscaped campus. York enjoys a safe, friendly atmosphere with facilities including bars, shops, theatres and concert halls all within easy walking distance.

The University has undergone an unprecedented period of expansion and renewal since 2000. We have invested in twenty new buildings on the original campus and have completed the first and second phases of a £750m campus expansion. Our investment in new colleges, teaching and learning spaces, laboratories, research facilities and a new sports village mean there has never been a better time to join us.

During this period of change we’ve worked hard to retain our friendly, informal and collegiate atmosphere, which is important to our core values of inclusivity and interdisciplinarity.

We have a thriving international community and are committed to providing staff moving to York with as much support as possible through our Relocation Package and Welcome Officers.

The University is committed to promoting a diverse and inclusive community - a place where we can all be ourselves and succeed on merit. We offer a range of family friendly, inclusive employment policies, flexible working arrangements, staff engagement forums, campus facilities and services to support staff from different backgrounds.

For further information please visit our employee benefit pages.
**The City of York**

Internationally acclaimed for its rich heritage and historic architecture, York's bustling streets are filled with visitors from all over the world. Within its medieval walls you will find the iconic gothic Minster, Clifford's Tower and the Shambles - just a few of the many attractions.

But York isn’t just a great place to visit - it’s also a great place to live and work. While nourishing a vibrant cosmopolitan atmosphere, York still maintains the friendly sense of community unique to a small city.

Visit [www.visityork.org](http://www.visityork.org) for more information on the city of York.

**Shopping, culture and entertainment**

York boasts specialist and unique boutiques but also all the high street stores on its busy shopping streets. Alongside them you will find cinemas, theatres, an opera house, art galleries, a vast range of restaurants, live music venues and clubs. York is particularly renowned for its multitude of pubs and bars, from the modern to the medieval.

**Housing and schools**

Whether you choose to live close to the city, in one of the surrounding villages or further afield, you will find a wide range of housing within comfortable distance of York and the University. For families, the area has a range of excellent schools both in the state and independent sector.

**Great location**

York is one of Britain’s best-connected cities. Halfway between London and Edinburgh on the East Coast mainline, on intercity trains you can reach London King’s Cross in less than two hours and Edinburgh in two and a half hours. York is also well served by road links, and it is easily accessible from the A1, M1 and the M62.

For those travelling from overseas, Manchester Airport is two hours away and Heathrow Airport just three and a half. Flights from nearby Leeds Bradford Airport provide easy access to mainland Europe. By Eurostar from London St Pancras, Paris is just over six hours away.

**Yorkshire**

The Lonely Planet guide recently declared Yorkshire the third best region in the world to visit. There is something to cater to every taste, whether it be the rugged landscapes of the Moors or the Dales, the picturesque seaside towns of Scarborough and Robin Hoods Bay, the gothic architecture of Whitby or the vibrancy of cosmopolitan Leeds.
Apply online
- Go to https://jobs.york.ac.uk
- Find this job using reference 7795
- Complete the online application form

You will need to submit your completed application by midnight (local UK time) on 4 August 2019

What will I need?
You will need to upload:
- your CV
- a letter describing how you meet the requirements of the job

You will also need details of 2 referees.

Help and assistance
Direct any informal queries to jobs@digitalcreativity.ac.uk

If you have any questions about your application, contact the HR Services team:
- recruitment@york.ac.uk
- +44 (0)1904 324835