



M4C Collaborative Doctoral Award (CDA)

Project Title					
Immersive virtual environments for networked live performance in a post-covid touring context.					
LEAD INSTITUTION					
Name of HEI institution	De Montfort University				
Lead regional city	Birmingham 🗆	Coventry \Box	Leicester 🗵	Nottingham 🗆	
PARTNER ORGANISATION					
Name of organisation	Motionhouse Dance Theatre				
URL for organisation	https://www.motionhouse.co.uk				
website					
THE RESEARCH PROIECT					

Working with both De Montfort University's Institute of Creative Technologies and Motionhouse Theatre, this project conducts leading research on the transformative potential and requirements of extended reality within a cultural performance setting. This transdisciplinary research will operate across academic communities and performing arts practice and develop skills and research across the disciplines of dance, theatre, gaming, and creative technologies to shape leading work on extended reality within a performance setting.

Both Motionhouse Theatre and DMU's Institute of Creative Technologies are world-leading. This project provides a unique opportunity to disrupt the performing arts sector through technological advancements, and to disrupt what 'performance' means and can entail. In practice, the project will operate across multiple sectors and disciplines: across academic research and praxis, and across dance theatre and performance, XR, and gaming.

A key outcome of this research will be a framework of transformational practice to support performance sectors in their adoption of new technologies for live performance. The CDA draws upon DMU's leading research in XR immersive performance and storytelling, centred on the audience experience. The CDA also immerses itself in the strategic and operational work of a live performing theatre, working on the transformative potential of an entire area of performing arts/extended reality area, through the lens of one theatre company. The research adopts a practice-based research methodology, providing a systematic modular approach, with research evolving through a series of mini projects/prototypes developed through collaboration between the student, DMU, and Motionhouse, and research evolving iteratively through prototypes and findings, shaped by the specific skills of the successful student. Whilst the precise area of work will be co-developed through the tripartite relationship of student, university, and theatre company, we envisage the CDA examining and building on paradigmatic changes in meanings and practice of consumption culture, the adoption and potential of extended reality, and audience experiences. 3 key questions will guide the research:

- 1. How can the affordances of extended reality (XR) be harnessed to support *live* dance performance, rather than presenting recorded content?
- 2. What are the challenges of developing an interactive and responsive experience between live performer and audience within an XR environment
- 3. What industry-wide support can be developed to realise XR live practice as a new audienceconsumption model across performing arts?

The supervision team comprises Sophy Smith, Director of the Institute for Creative Technologies at De Montfort University and Dr Jethro Shell with respective expertise in creative technologies and performance storytelling, and Computational Intelligence. The team also brings in the performance directorship of Dr Kevin Finnan from Motionhouse Theatre.

The successful candidate will be based at the Institute of Creative Technologies at De Montfort University and complete the practice-based research programme led by IOCT. As well as being part of the IOCT, the student will be part of the Motionhouse team, and this research will need them to engage fully with the whole company – Executive Director, Artistic Director, Communications and Development Director, Audience Development Manager, Programme Producer and Digital Content Officer. As a part of the Motionhouse team the student will receive a full workplace induction. The lead supervisor and partner supervisor already have an excellent long-term working relationship across both practice and research, which provides and incredibly strong foundation for the PhD. Throughout each year, there will be key times when the PhD student will be working in the Motionhouse studio, first developing and then testing the research. These times will be agreed in negotiation with the partners, once the company's rehearsal and touring schedule is confirmed.

The successful candidate will demonstrate skills and expertise in creative technologies and to be empathetic to the performing arts. Some knowledge of programming and/or curating in performing arts would be desirable but not essential. A bespoke programme of training will be designed to support foundational technical and research skills development in year 1. Thereafter, skills developed will be identified and developed through a series of mini projects or prototypes running over the 4 years of the PhD.

HOW TO FIND OUT MORE	
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