University of Kent

Kent Academic Repository

Ppali, Sophia, Branch, Boyd, Covaci, Alexandra, Wohl, Bea and Lalioti, Vali (2022) ***A Workshop on Designing the Performances of the Future at IMX 2022.*** **[Conference item]**

Downloaded from

https://kar.kent.ac.uk/96065/ The University of Kent's Academic Repository KAR

The version of record is available from

https://doi.org/10.6084/m9.figshare.20069453.v1

This document version

Publisher pdf

DOI for this version

Licence for this version

CC BY (Attribution)

Additional information

Versions of research works

Versions of Record

If this version is the version of record, it is the same as the published version available on the publisher's web site. Cite as the published version.

Author Accepted Manuscripts

If this document is identified as the Author Accepted Manuscript it is the version after peer review but before type setting, copy editing or publisher branding. Cite as Surname, Initial. (Year) 'Title of article'. To be published in ***Title of Journal*** , Volume and issue numbers [peer-reviewed accepted version]. Available at: DOI or URL (Accessed: date).

Enquiries

If you have questions about this document contact ResearchSupport@kent.ac.uk. Please include the URL of the record in KAR. If you believe that your, or a third party's rights have been compromised through this document please see our Take Down policy (available from https://www.kent.ac.uk/guides/kar-the-kent-academic-repository#policies).

Performances'22 : A Workshop on Designing the Performances of the Future at IMX 2022

SOPHIA PPALI*, University of the Arts London, United Kingdom
BOYD BRANCH, Coventry University, United Kingdom
ALEXANDRA COVACI, University of Kent, United Kingdom
BEA WOHL, University of the Arts London, United Kingdom
VALI LALIOTI, University of the Arts London, United Kingdom



Fig. 1. Performances of the future. A musician playing music in virtual reality [7] (left) and actors improvising online [1] (right)

This workshop aims to start a conversation as to what the performances of the future might look like by inviting both researchers and practitioners to present their work in this domain. It will explore the interception of technology and performance, with a focus on how technology might be leveraged to enhance performances and the process of developing performances, provide new ways to reach and interact with audiences, as well as how it can create new ways of performing.

Additional Key Words and Phrases: performances, audiences, artists, immersive technologies

1 BACKGROUND, SCOPE AND AIM

In the wake of the pandemic, more artists than ever are exploring technology as a means of reaching and interacting with their audiences. Over the past two years, actors and musicians have been shifting their creative energies to experiment and explore the possibilities of streaming live performances and bridge the gap between physical events and online participation. Streaming trends throughout lockdown have shown that it is essential for artists to integrate new and alternative forms of media into their routine, and that audiences want to connect with them through more immersive and visual content. More data has since emerged that suggests hybrid and virtual events are here to stay, with many expressing that they would keep attending them after restrictions were lifted [1]. Therefore, it is necessary to delve into how digital technologies can be leveraged to enhance existing performances and create new methods of performing.

*Corresponding author. Email: sp815@kent.ac.uk.
[1]https://unitedtalent.app.box.com/v/UTACOVIDConsumerStudy

IMX '22 - Performances, 2022, Portugal
2022 ACM International Conference on Interactive Media Experiences. Copyright held by the owner/author(s).

Emerging technologies (e.g., Mixed Reality, transmedia storytelling, Internet of Things, multisensory devices etc.) enable unexplored types of experiences in live theatre and music performances. As it has been shown in similar contexts [3, 4, 6], these technologies have the potential to transform the perspective of the audiences who can physically participate and interact through innovative interfaces. At the same time, they can also offer performers new ways to manipulate mediated spaces in real-time, enriching their range of possibilities for artistic expression. Research in this direction has looked into using immersive technologies for enhancing artists' rehearsals and stimulating their creativity [1, 5, 7], engaging opera audiences [8] or understanding the audiences' motivations for mediated performances [2]. However, despite this emerging interest, there have been few opportunities to survey these developments from a distance, and to have artists and audiences share their observations.

With this workshop, we aim to start a conversation between emerging digital live arts pioneers, technologists, developers, researchers and audiences to explore together the potential avenues for live performances. We invite both researchers and practitioners to present their work, experiments, insights, successes, and failures, as well as their fears and visions for this domain. We will explore together the interception of technology and performance, with a focus on how technology might be leveraged to enhance performances, performance preparation, provide new ways to reach and interact with audiences, as well as create new ways of performing.

2 CONTEXT AND TOPICS

This workshop will offer an interdisciplinary forum for idea exchange, co-design exploration, networking and discussion for researchers, technologists, designers and performance practitioners interested in research on designing the performances of the future. Researchers from both academia and industry, designers, performers and people with an interest in technology-enhanced performances are invited to submit pictorials or demos. Topics of interest include, but are not limited to, the following:

- Methods of designing hybrid /extended reality/ multisensory performances
- Human - machine performances
- Sensor and robotic integration to performances
- New ways of engaging and interacting with audiences
- Technology-enhanced performances created using co-creation/participatory design methods
- Opinion pieces on what the future of performance might hold.

We expect our workshop to:

- Connect a community of researchers and practitioners who are interested in the future of live performances
- Investigate the challenges, needs & opportunities of designing technology-enhanced performances
- Outline guidelines for designing technology-enhanced performances

3 ORGANISERS

The co-organisers of the workshop bring multiple perspectives and expertise from computer science, engineering, performance, extended reality and digital innovation.

Sophia Ppali is a research fellow at the Creative Computing Institute, University of Arts London, undertaking research on the impact of the COVID-19 pandemic on professional artists and how digital technologies can help them recover. She is also a PhD Candidate at the University of Kent. She holds an MSc from Imperial College London, an MA from the Royal College of Art and a BA from the University of Kent.

Boyd Branch is a technologist for XR and live performance and a lecturer in digital media at Coventry University. He is the creator of Virtual Director, a software platform for creating remote theatre, and founder of the Improvisational Media & Performance Lab, which explores how improvisational pedagogies can be utilised to create accessible, adaptive, and supportive technologies.

Dr Alexandra Covaci is a researcher in the field of virtual reality and currently a Lecturer in the Digital Design course at the University of Kent. Her research activities lie at the confluence of VR, multisensory media, human computer interaction and psychology. She is particularly interested in creating a systematic understanding of multisensory experiences for interactive technologies. Her approach is driven by a mix of human factor studies and creativity.

Dr Bea Wohl is a research associate at the Creative Computing Institute, University of Arts London. They hold a PhD in Digital Innovation from the HighWire CDT at the University of Lancaster. They have worked in consultancy and communications for over a decade, focusing on the creative and cultural sectors. They have an MA in Media and Communications and an Advanced Certificate in PR.

Dr Vali Lalioti is the Programme Director of the Creative Computing Institute, University of the Arts London, and the Director-Founder of The Innovation Consultancy. She has been a professor and innovator in the field of VR/XR for 25 years. She has led BBC's first AR production that received the British Television Society judges award 2003 and the InnovateUK funded VR Rehearse & Perform in 2021. She holds a PhD in Computer Science, an MBA and an MRes in Design.

4 PROGRAMME

The programme of the workshop is presented in Table 1.

Table 1. Detailed programme for the workshop. The schedule is set in Western European Summer Time, Portugal, UTC +1.

14:00 – 14:15	Welcome and introductions
14:15 – 14:35	Keynote I - Shannon Harvey - *Creative Alchemy One*
14:35 – 14:50	Design activity I
14:50 – 15:30	*Paper and demo session I*
	a. Agora _ a community podium, Dr. Stavros Dendrinos, George Larkos
	b. Exploring the potential of mobile projectors as body-instrument for performance, Mayank Loonker, Rocio von Jungenfeld, Christos Efstratiou
	c. Coding Two, James Gibbons - MacGregor
	d. Performative Journeys: Ensuring the Relevance of Grassroots venue experiences, Alexander Newson, Sebastian Ervi
	e. Email from beyond reality, Alex Pavelescu
	f. The abductive wisdom of dance as an empirical method, Hunter Brueggemann
15:30 – 15:40	Break
15:40 – 16:10	Design activity II
16:10 – 17:10	*Paper and demo session II*
	a. Miso kitchen, Jackie Walduck and Chloe Cooper
	b. Come Hither to Me, Sahar Sajadieh and Hannah Wolfe
	c. The Severance Theory: Welcome to Respite, Deirdre V. Lyons
	d. Survivor's Way, Alex Oliszewski
	e. Quickly Photographed and Released Unharmed, Pandelis Diamantides
17:10 – 17:30	Keynote II - Alex Kane - *Volta XR*
17:30 – 17:45	Final discussion and concluding remarks

ACKNOWLEDGMENTS

We thank the organisers of the ACM International Conference on Interactive Media Experiences for the opportunity to host this workshop. The project reported in this article was supported by HEartS Professional, a project funded by the United Kingdom's Arts and Humanities Research Council (AHRC) to investigate the health, economic, and social impact of COVID-19 on professionals in the arts, Grant no: AH/V013874/1.

REFERENCES

[1] Boyd Branch, Christos Efstratiou, Piotr Mirowski, Kory W Mathewson, and Paul Allain. 2021. Tele-Immersive Improv: Effects of Immersive Visualisations on Rehearsing and Performing Theatre Online. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*. 1–13.

[2] Jean-Philippe Charron. 2017. Music audiences 3.0: Concert-goers' psychological motivations at the dawn of virtual reality. *Frontiers in psychology* 8 (2017), 800.

[3] Alexandra Covaci, Longhao Zou, Irina Tal, Gabriel-Miro Muntean, and Gheorghita Ghinea. 2018. Is multimedia multisensorial?-a review of mulsemedia systems. *ACM Computing Surveys (CSUR)* 51, 5 (2018), 1–35.

[4] Henrik Jodén and Jacob Strandell. 2021. Building viewer engagement through interaction rituals on Twitch. tv. *Information, Communication & Society* (2021), 1–18.

[5] Vali Lalioti, Sophia Ppali, Andrew J Thomas, Ragnar Hrafnkelsson, Mick Grierson, Chee Siang Ang, Bea S Wohl, and Alexandra Covaci. 2021. VR Rehearse & Perform-A platform for rehearsing in Virtual Reality. In *Proceedings of the 27th ACM Symposium on Virtual Reality Software and Technology*. 1–3.

[6] Gabrielle Lennox and Hannah Mason. 2022. Virtual Dream Reality Check: A Case of Interactive Digital Theatre from the Royal Shakespeare Company. *Body, Space & Technology* 21, 1 (2022).

[7] Sophia Ppali, Vali Lalioti, Boyd Branch, Chee Siang Ang, Andrew J Thomas, Bea S Wohl, and Alexandra Covaci. 2022. Keep the VRhythm going: A musician-centred study investigating how Virtual Reality can support creative musical practice. In *CHI Conference on Human Factors in Computing Systems*. 1–19.

[8] Alina Striner, Sarah Halpin, Thomas Röggla, and Pablo Cesar. 2021. Towards Immersive and Social Audience Experience in Remote VR Opera. In *ACM International Conference on Interactive Media Experiences*. 311–318.