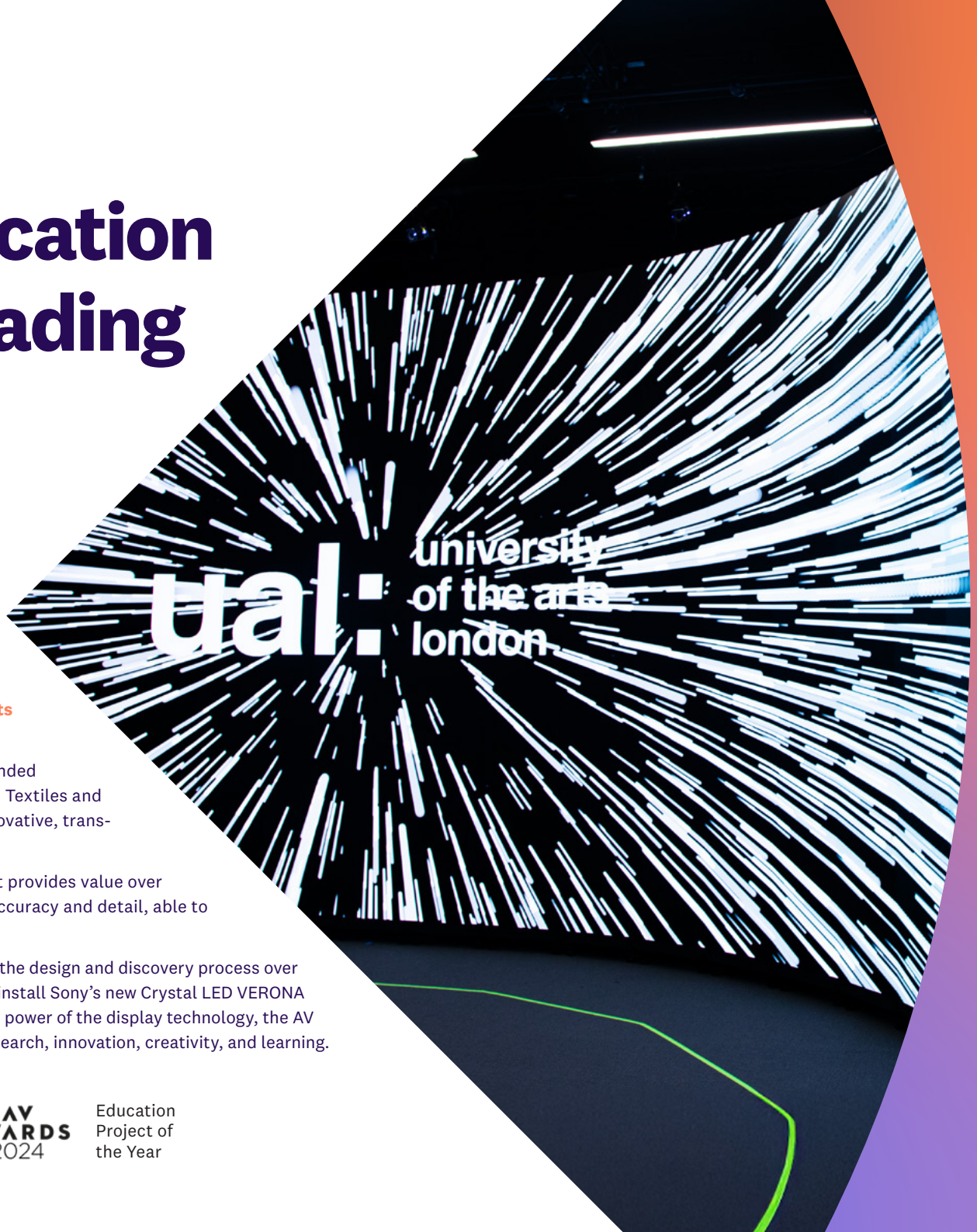
case study

Redefining education with a world-leading XR VP



The Background

University of the Arts London (UAL) offers an extensive range of courses across the arts, across communication, fashion, design, fine art, and performing arts. It was ranked second in the world for Art and Design in the 2024 QS World University Rankings® and is home to a diverse community of 21,092 students from 130 countries.

In June 2023, UAL announced the development of a specialist extended reality virtual production (VP) research volume through its Fashion Textiles and Technology Institute (FTTI). The aim was to create capacity for innovative, trans-disciplinary, practice-led research in VP/XR textiles and dress.

To support the new facility, UAL was seeking a display solution that provides value over an extended lifespan while delivering the highest possible colour accuracy and detail, able to capture and display digital garments and textiles exquisite detail.

Kinly was appointed as UAL's trusted technology advisor to support the design and discovery process over a period of four months. UAL subsequently secured the first deal to install Sony's new Crystal LED VERONA displays and create a research-grade XR/VP stage. Coupled with the power of the display technology, the AV solutions support UAL in its ambition to create a powerhouse for research, innovation, creativity, and learning.

Kinly | ual: university of the arts london | AV AWARDS 2024 Education Project of the Year

Working together. Everywhere | kinly.com

Kinly | ual: university of the arts london

The **solution**

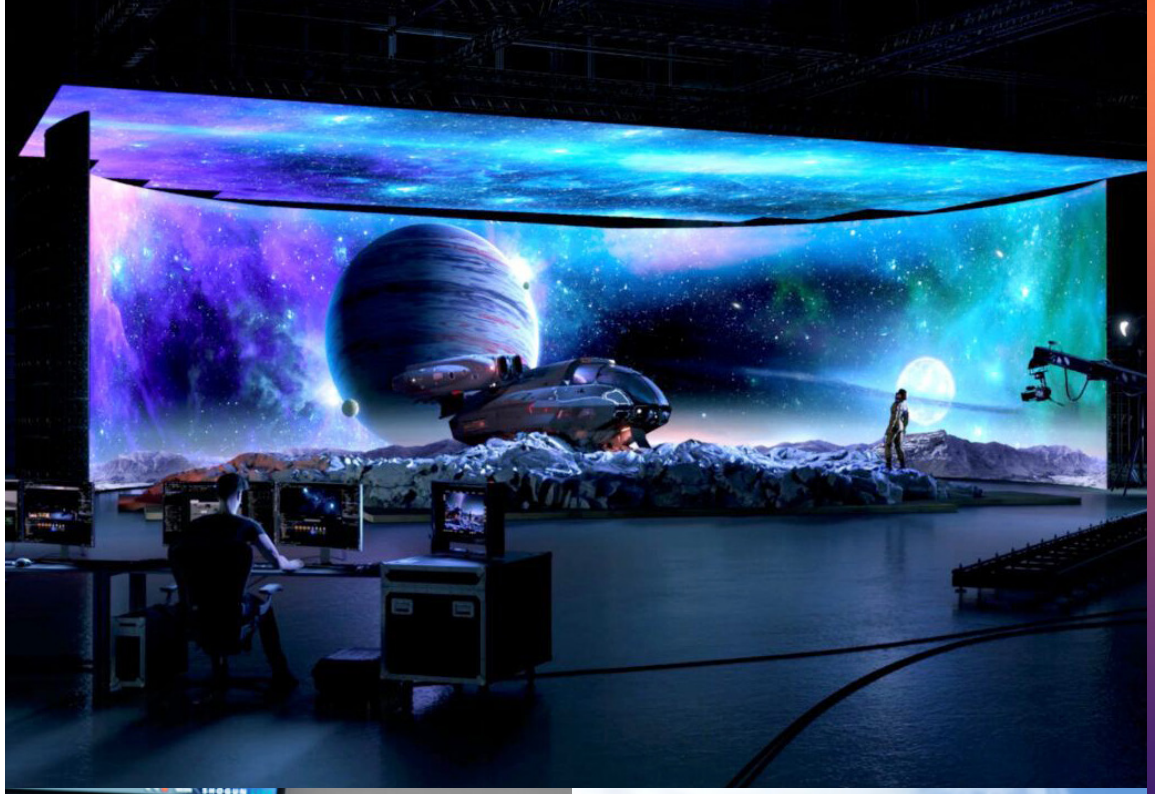
Virtual production and in-camera visual effects demand a new and unique set of performance requirements in both LED displays and cinema cameras. The high-end Sony VP system installed by Kinly at UAL is the first outside Pinewood Studios in the UK, and the first of its kind designed specifically for research.

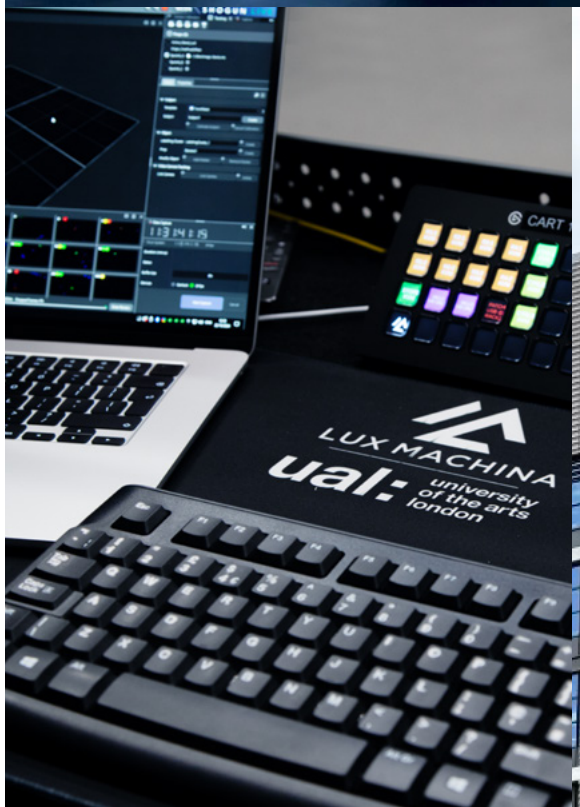
Specialist supplier and subcontractors, Lux Machina, and Arri, worked in close collaboration with Kinly and UAL to develop the design and solution specification. On completion of the design process, we then went on to manage the fabrication, import and integration of the cutting-edge XR technologies. Structural building checks were necessary due to the scale and weight of the solution while the provision for specific network dependencies was identified and requested for UAL's IT team to provide.

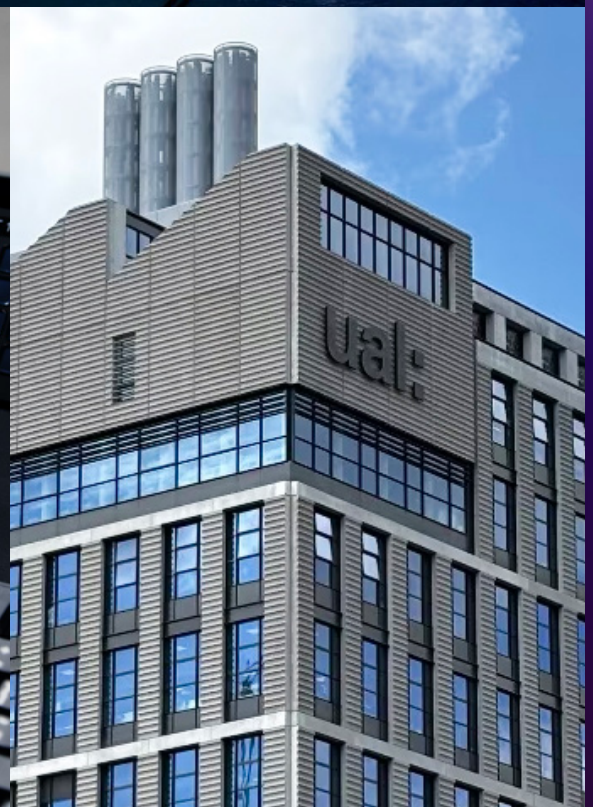
With expert integration, the displays in 1.5mm and 2.3mm pixel pitch meet UAL's remit to build a flexible VP stage with incredible quality, low reflectance, and maximum flexibility. This also delivers deep black image expression and low-reflection performance, greatly reducing the contrast loss caused by light from adjacent LED panels and studio lighting equipment.

Both screens integrate with Brompton Technology's advanced Tessera LED processors. Brompton LED processing offers unparalleled colour management and flexibility, making it ideal for large-scale LED displays in VP environments.

UAL will also benefit from Sony's Virtual Production Tool Set. This is a software-based solution that allows users to design the picture needed for virtual production to pre-visualise scenes and creative concepts using Unreal Engine to develop, pre-visualise, and configure the Crystal LED displays for the rapid deployment of VP ICVFX projects.







SECTOR
EDUCATION

LOCATION
LONDON, UK

SOLUTION
VIRTUAL PRODUCTION STAGE

Kinly | ual: university of the arts london

The **result**

Despite the Suez Canal blockage leading to delayed delivery timeframes, installation and project completion deadlines were successfully met owing to the collaboration between Kinly and all parties involved in the project.

Now fully operational, new research opportunities now enable the development of XR experiences including the potential for digital access to historical textile and dress archives. These assets can then be applied to the screen and real-time spaces.

The UAL is expecting a broad and diverse range of projects to make use of the new space. This is set to make VP available to fields that have not explored the technology before, such as contemporary dance, costume, and archive, as well as technology-focused researchers working with industry partners.

In November 2024, the UAL East Bank Campus project was awarded the prestigious Education Project of the Year at the 2024 AV Awards, a testament to the vision, innovation and collaboration of all parties involved.

Kinly continues to support UAL with teaching space design and development activities plus the acoustic treatment of editing facilities at its East Bank Campus.

Why **Kinly?**

Bringing people & technology together for better productivity wherever the work happens — because great things happen when people work together.

The **testimonial**

Professor Jane Harris, director of UAL's Fashion, Textiles and Technology Institute.

"We're thrilled to announce the development of UAL's specialist XR lab facility. These technical advancements, paired with ambitious research and development planned for the longer term, will present a world of opportunities – not only to the textile and dress sectors, but also for the UK's cultural and XR industry more broadly."