香港公開大學
THE OPEN UNIVERSITY
OF HONG KONG

The Open University of Hong Kong launches an innovative degree program with Unity

Unity Academic Alliance helps the OUHK train and certify students for many highly competitive industries.

unity

The challenge
To meet industry demand for highly skilled Unity RT3D and AR/VR developers, and innovate and modernize curricula with the latest in visualization technologies

Unity solutions in use
Unity Pro, ProBuilder, HDRP, Asset Store, XR Interaction Toolkit, AR Foundation

Program size
60 students

Location
Hong Kong

How does a university integrate the latest visualization technologies into a traditional arts program to provide students with highly marketable job skills? And how do they meet the growing demand for real-time 3D (RT3D) and AR/VR professionals in film and TV production, advertising, healthcare, engineering and other industries?

The first UAA partner in Hong Kong

The Department of Creative Arts of the School of Arts and Social Sciences at the Open University of Hong Kong reached out to the Unity Academic Alliance (UAA) for help to develop a multidisciplinary degree program in Computing and Interactive Entertainment that would reflect comprehensive skills in Unity development. The OUHK is the first institution in Hong Kong to embrace the UAA, and Unity is happy to offer affordable access to Unity products and services, including curriculum frameworks, professional development, and certifications.

"The UAA academic discount and new curricular frameworks for AR, VR, gaming, architecture, engineering, and construction will help us address industry demand further by expanding RT3D and AR/VR skills into more degree programs at the OUHK."

– Dr. Rebecca Leung, Associate Professor, Head, Department of Creative Arts, School of Arts and Social Sciences, the Open University of Hong Kong

The results

— Increased visibility as a post-secondary leader by offering cutting-edge RT3D and AR/VR programs

— Expanded their degree program to empower more students with Unity skills

— Graduated students with Unity Certifications in an extremely competitive job market

— Upskilled instructors in Unity capabilities and techniques
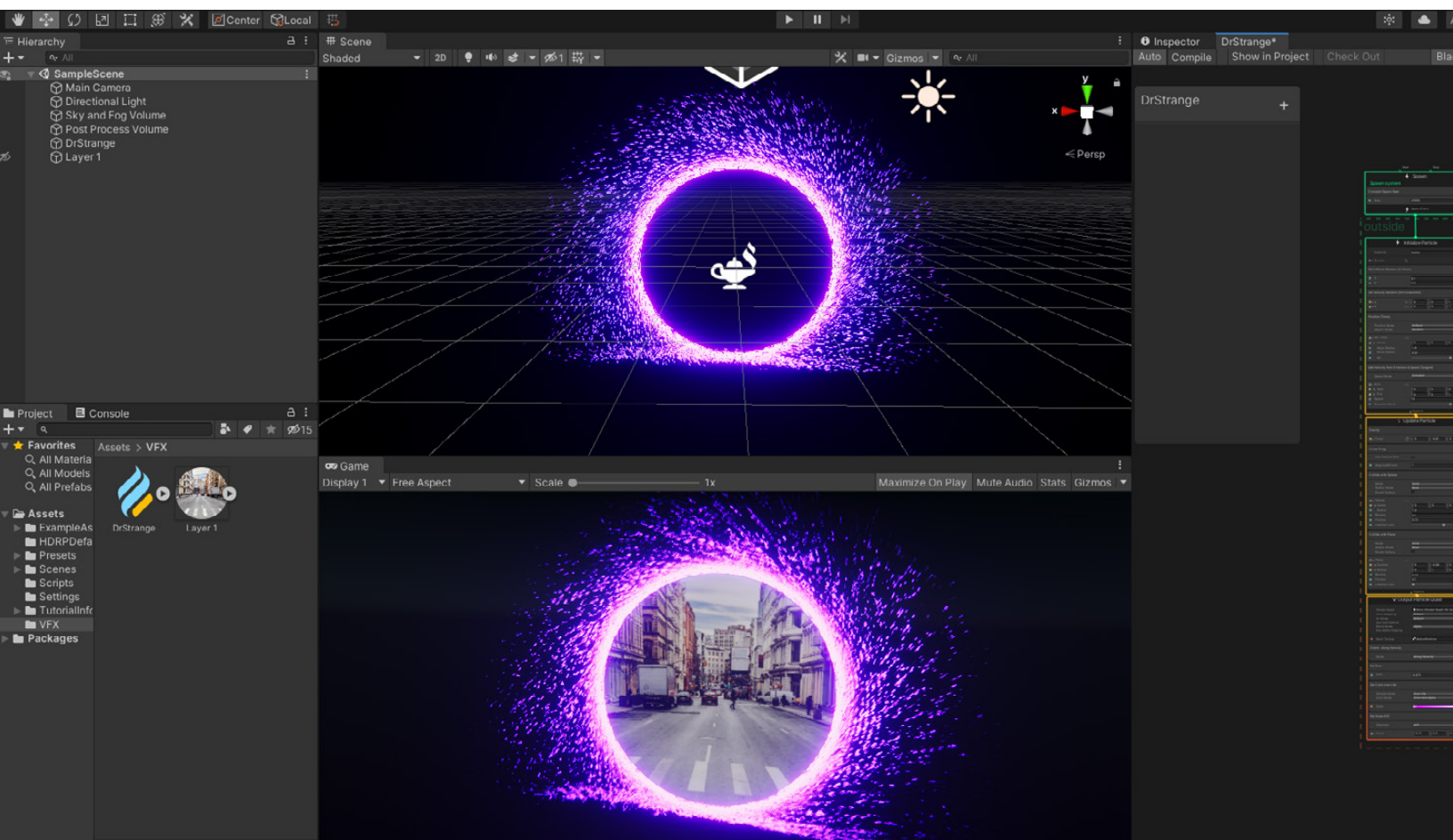
Government support for a creative/technical approach

Founded in 1989, the OUHK has evolved from a distance-learning institution for working adults studying part-time to become a full-fledged university multiple-degree program. Anticipating rapidly growing demand for tech-savvy creators across all industries, the government funded the OUHK with HK$100M to meet the need for a program that combined both creative and visualization skills.

The OUHK's Dr. William Lai was experienced in creating undergraduate-level courses that used RT3D with a variety of applications such as CAD, Maya, and Unity. When he took on responsibility for the Computing and Interactive Entertainment program, which integrates real-time graphic design and human computer interaction (HCI), he focused on one development platform. "Unity is particularly good for developing interactive entertainment applications. It's also very user-friendly for art-oriented students who may not have much technical expertise."

UAA helps expand the program

The job market for Unity developers in Hong Kong is quite competitive, even during the COVID-19 pandemic. Unity Certifications provide the credibility for recent graduates to get in the door not only at game companies, but at architecture and engineering firms as well. Currently, 25 students are on track to complete the Unity Certified Associate level of certifications, and two professors are preparing for the Unity Certified Professional level of exams.

The OUHK's Dr. Rebecca Leung credits UAA with increasing student success. "The UAA academic discount and new curricular frameworks for AR, VR, gaming, architecture, engineering, and construction will help us address industry demand further by expanding RT3D and AR/VR skills into more degree programs at the OUHK."

The core mission of UAA is to help post-secondary institutions like the OUHK innovate and stay relevant by starting and expanding RT3D and AR/VR programs that prepare students for high-demand jobs. To do this, UAA offers curricular frameworks composed of stackable, competency-based modules, certifications and professional development, and a cost-effective discount program. Lai estimates that over half of the OUHK's Computing and Interactive Entertainment graduates are using Unity in their current jobs.

Students learn comprehensive skills with Unity

In addition to leveraging credits for Unity Certified Associate and Unity Certified Instructor courseware and discounted Unity licenses, students make use of both the XR Interaction Toolkit and AR Foundation packages. The toolkit was particularly valuable for those who lacked coding experience, and AR Foundation made their content work cross-platform for different head-mounted displays and hand controllers. They also downloaded a number of tools and asset packages from the Unity Asset Store.

In a typical student project, a four-person team creates a story and builds prototypes with ProBuilder. They then put together a series of real-time cutscenes that use the High Definition Render Pipeline (HDRP) and a variety of other Unity capabilities. In one project, students built a short animation of a lab that leaked viruses. The finished projects are peer-judged for creativity, artistry, and technical execution.

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Finding more applications for RT3D and AR/VR

The OUHK is looking forward to the long-term development of their Computing and Interactive Entertainment program. They hope to offer courses in Unity MARS and Unity ArtEngine in the near future, engaging students in projects involving cultural history, safety, and creative storytelling. Unity MARS enables building intelligent AR apps that are context-aware and responsive, while ArtEngine lets students experiment with different surfaces by automating and accelerating the photoconversion of physically based rendered (PBR) materials.

Making use of these and other Unity capabilities, Leung sees RT3D and AR/VR adding value across departments campus-wide. "We hope Unity real-time technology can enhance curricula in other fields of study in the department, especially in Chinese culture." Partnering with UAA, her hope may soon be realized.
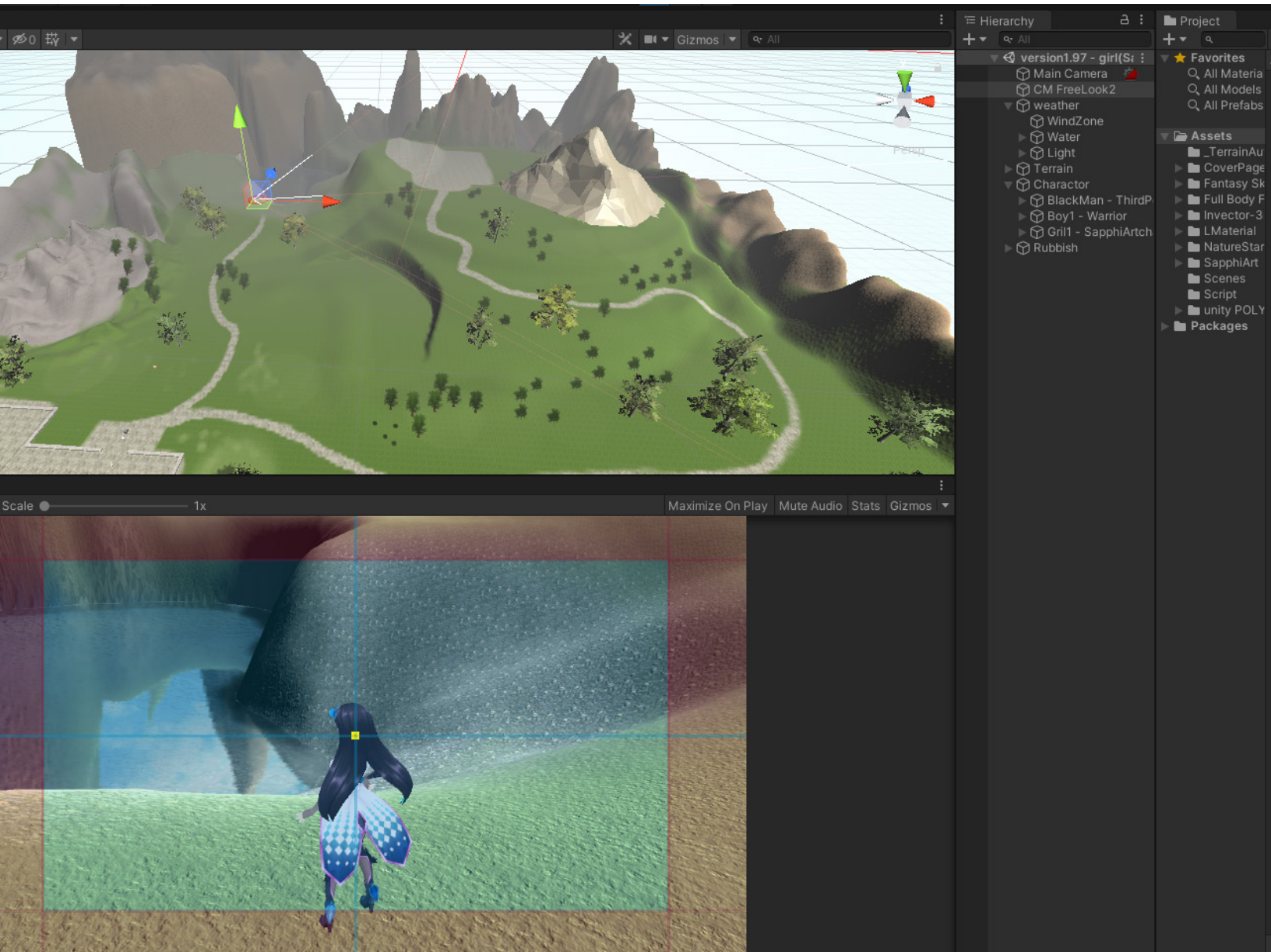
Join the Unity Academic Alliance

Accelerate your interactive design and development programs with real-time 3D, VR and AR technology. And give your students an edge in the job market by preparing them for the expansive fields of interactive media, technology, and innovation.

[Learn more](#)

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