

AR / VR App Design & Development Workshop



Master the fundamentals of VR and AR development, learn from expert industry mentors, and get hands-on experience in cutting-edge development technology from this workshop!

Augmented Reality, Virtual Reality, Mixed Reality - A guide to the technology with industry practice sharing. Live demos and class assignments included.

Award of Certificate of Accomplishment

Certificate of Accomplishment issued by the Hong Kong Productivity Council will be awarded to participants in full attendance.

Programme code	10011961-01
Date and time	25-26 Jan 2022 (09:30-17:00, Total: 14 hrs)
Venue	Computer room 112, 1/F, HKPC Building, 78 Tat Chee Avenue, Kowloon Tong
Medium	Cantonese, supplemented with English terminology
Course fee	HK\$5,200
Pre-requisition	Basic concepts and knowledge in programming

Course Highlights

We will walk through AR/VR/MR technologies' maturity milestones and outlook, technical concepts and best practice of these new technologies. Understand the hardware and software equipment required for the deployment, system design and application programming, data protocol/ format/ security related technical consideration. Trainer will share some key use case applications in corporate environment/ healthcare sector locally and internationally.

Trainer Information

Alan LEE has rich training and project development experience, at least 7 years, in the design and delivery of Big Data Analytics, web and Apps Development on iOS Platform, Fintech, and Blockchain and AR/VR technologies and applications. He holds a bachelor's degree in information engineering with computer graphics coverage, 3D graphics creation, Programming in Creating Virtual Reality, Image Recognition Courses for AR, Signal Processing for AR processing, and projects on 3D Hardware Glasses with Proprietary AR and VR algorithms.

Course Outline

Chapter 1 - Overview of Visual Innovation

Introduction to AR and VR || Trends of Visual Innovation || Maturity Milestones || Future Outlook

Chapter 2 - Introduction to Augmented Reality

Introduction to Augmented Reality || How it Works

Chapter 3 - Introduction to Virtual Reality

Introduction to Virtual Reality || How it Works

Chapter 4 - Hardware for AR & VR

Augmented Reality Hardware || Virtual Reality Devices

Chapter 5 - System Design and Application Programming

Introduction to Unity 3D || 3D Game Engines || Introduction to Unity and Unreal, VR SDK
How it Works in Unity || Technical Concepts & Best Practice || Data Protocol / Format / Security

Chapter 6 - Introduction to Assets, 3D Modelling

What is 3D Modelling || Example: Blender, Maya, 3DS || What is 3D Scanning || Example: David SLS2, Da Vinci, Structure Sense

What is 3D Models Store || Example: TurboSquid, Free3D, CGTrader, Sketchfab

What is 360 camera || Example: Ricoh Theta, Samsung Gear 360

Mixed with Audio || Example: FreeSound, Audacity, Adobe Audition

Chapter 7 - VR with Web

Javascript with WebVR || Browser Support: WebVR Rocks, Mozilla VR || What is Entity Component System Approach || HTML Framework: A-frame || React VR || Three.js || UnityScript

Chapter 8 - Augmented Reality with Vuforia

What is Vuforia || Features of Vuforia || Support for Android and iOS || Head-mounted Displays
Example: Microsoft HoloLens

Chapter 9 - Augmented Reality with ARCore

Examples || WebGL shaders

Chapter 10 - Demo and Exercises

Chapter 11 - Use Cases and Application Examples in AR and VR

Healthcare || Entertainment and Gaming || Architecture, Engineering, and Construction
Shopping || Telecom and Telepresence || Education

Enrolment Methods

1. Scan the QR code to complete the enrolment and payment online.
2. Mail the crossed cheque with payee name "Hong Kong Productivity Council" (in HK dollar) to HKPC Academy, Hong Kong Productivity Council, 3/F, HKPC Building, 78 Tat Chee Avenue, Kowloon (attention to Ms Cherry LAM). Please indicate the course name and course code on the envelope.



[Enrolment Link](#)

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