

## 應用深度影像技術於實景影像即時三維建模

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**摘 要** 近年來利用虛擬實境進行虛擬導覽的應用日益普及，但由於多數虛擬導覽裡的場景過於像素化或者平面化，使其影像過於平淡因而使用體驗感受大打折扣。為其增進使用體驗感受，將模型立體化，使其使用沉浸感提升，本研究主要透過 kinetic V2，將場景轉換成 3D 模型。利用其中的 RGB 相機與 RGB-D 影像，先藉由 RGB-D 影像標出特徵點，再與 RGB 相機的影像進行比對整合後，將者影像合成出三維模型，以提升模型精緻程度，並降低模型製作的難度。

**關鍵詞：** kinetic V2、RGB-D、三維模型。

## Applications of depth image technologies on real-time 3D modeling for real images

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**ABSTRACT** In recent years, it becomes more popular that virtual tours have used the technologies of virtual reality for application. However, their experience and perception after the usage of such applications are bland, because most of the scenes in virtual tours are too pixelated or flat. To promote the perceptive experience, construct the three-dimensional models, and enhance the immersive feeling, this study utilizes the device of Kinetic V2 to convert scenes into 3D models. From its RGB camera and RGB-D images, this study first marks the feature points by the RGB-D images, then compares and integrates with the images from the RGB camera. The results will be synthesized into a three-dimensional model to improve its refinement and decrease the difficulty of modeling. °

**Key Words:** kinetic V2, RGB-D, 3D Model.

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