Augmented Reality Design-Examples for Google Earth astronomy

曹文豪、楊豐兆

E-mail: 365055@mail.dyu.edu.tw

ABSTRACT

Cloud computing services of astronomical satellite map enhanced components ’ extension function, and increase the diverse contents in Google Earth. The applications of astronomical satellite map in Google Earth are growing quickly in the teaching matter, such as the earthquake information, the tsunami information, the weather information, and improving in a lager variety of digital contents. In this study, STAR WALK software which has already created a vast of virtual astronomy database as well as Augmented Reality (AR) technology was applied to Global Positioning System (GPS) services. This research was aimed at the combination of personal obtaining local astronomical images with STAR WALK astronomy database and AR technology to anchor points showing the virtual local astronomical map on the mobile device ’ s screen. The output exported as KML (Keyhole markup Language) file is to present the local real images and the virtual astronomy, and apply to the mobile devices for the public domain. In addition, this result can increase the contents of Google Earth astronomy map a better service to the public domain. The application AR of STAR WALK software is not only less elaboration but also conveniently combined with the astronomical Satellite Images of Google Earth. The promotion of the AR astronomy technology of STAR WALK and KML in Google Earth can strengthen the digital contents and create the public participants in the abundant services of astronomical Satellite Images, including the sharing of local astronomical wonders, the astronomical theme and information into Google Earth.

Keywords : Augmented Reality、Cloud computing services、astronomy map

Table of Contents

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