

ABSTRAK

Periklanan adalah strategi pemasaran yang bertujuan untuk membuat produk agar diketahui masyarakat. Salah satu sarana publikasi/iklan yaitu media cetak, misalnya brosur. Adanya brosur yang dibagikan kepada masyarakat sangat membantu masyarakat menemukan informasi tentang produk, termasuk indekos. Namun, penggunaan brosur memiliki kelemahan: brosur yang sudah dibaca sering kali berakhir di tempat sampah. Dengan Augmented Reality, brosur indekos dapat digunakan dengan lebih baik. Augmented reality memiliki beberapa metode atau algoritma yang digunakan salah satunya yaitu Algoritma Oriented FAST and Rotated BRIEF dan Metode Marker Based Tracking. Teknologi ini akan mengubah cara promosi produk yang biasanya hanya mengandalkan brosur atau spanduk 2D konvensional, menjadikannya lebih nyata, menarik perhatian, dan unik. Hal ini disebabkan ketika saat menggunakan Augmented Reality, objek 3D akan tampil di atas gambar marker 2D yang terdapat pada brosur melalui aplikasi yang diinstal pada perangkat Android. Berdasarkan hasil dari pengujian dapat disimpulkan bahwa aplikasi yang dibangun secara fungsional sudah dapat menampilkan hasil berupa objek 3D, explore objek 3D, pencarian indekos, serta informasi indekos seperti : fasilitas, harga sewa, luas kamar, alamat. Beberapa faktor yang dapat mempengaruhi kecepatan dalam pendeteksian marker antara lain intensitas cahaya, kamera yang digunakan, serta banyaknya interest point pada gambar yang dijadikan marker.

Kata Kunci: *Augmented Reality, Marker Based Tracking, Oriented FAST and Rotated BRIEF.*

ABSTRACT

Advertising is a marketing strategy that aims to make products known to the public. One means of publication/advertisement is print media, for example brochures. Having brochures distributed to the public really helps people find information about products, including boarding houses. However, using brochures has a downside: brochures that have been read often end up in the trash. With Augmented Reality, boarding house brochures can be used better. Augmented reality has several methods or algorithms used, one of which is the Oriented FAST and Rotated BRIEF Algorithm and the Marker Based Tracking Method. This technology will change the way product promotions usually only rely on conventional 2D brochures or banners, making them more real, eye-catching and unique. This is because when using Augmented Reality, 3D objects will appear above the 2D marker image contained in the brochure via the application installed on the Android device. Based on the results of the testing, it can be concluded that the functionally built application can display results in the form of 3D objects, explore 3D objects, search for boarding houses, as well as boarding house information such as: facilities, rental prices, room size, address. Several factors that can influence the speed of marker detection include light intensity, the camera used, and the number of interest points in the image used as a marker.

Keyword: *Augmented Reality, Marker Based Tracking, Oriented FAST and Rotated BRIEF.*