

**RANCANG BANGUN *CAMPUS TOUR GUIDE* BERBASIS
*AUGMENTED REALITY***

Skripsi

Diajukan untuk memenuhi sebagian persyaratan mencapai gelar Sarjana S-1
Departemen Pendidikan Ilmu Komputer
Program Studi Ilmu Komputer



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**PROGRAM STUDI ILMU KOMPUTER
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AUGMENTED REALITY

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ABSTRAK

Penyediaan layanan informasi tentang kampus Universitas Pendidikan Indonesia dapat diakses melalui laman web kampus. Namun, informasi yang ditampilkan berupa teks dan gambar yang bersifat abstrak, sehingga kurang menampilkan keadaan sebenarnya pada lokasi nyata. Kesulitan memahami informasi yang ada akan dirasakan oleh orang yang baru pertama kali berkunjung ke Universitas Pendidikan Indonesia. Menghadirkan seorang *tour guide* tidaklah efisien, karena performa seorang manusia sebagai *tour guide* pun dinilai tidak cukup konsisten. Salah satu cara untuk menyelesaikan permasalahan tersebut yaitu dengan memanfaatkan teknologi *augmented reality*. Pada penelitian ini akan menggunakan teknologi *augmented reality* metode *markerless* dengan *location based service* yang menggunakan data koordinat lokasi untuk memunculkan suatu objek *tour guide* berbentuk 3D. Aplikasi berbasis android ini dibangun menggunakan Unity3D dan *Mapbox* sebagai *framework* untuk membangun *location-based augmented reality*. Pada hasil percobaan, aplikasi ini dapat menampilkan model 3D sesuai lokasi yang ditentukan.

Kata kunci: *augmented reality, tour guide, campus guide.*

***DESIGN AND DEVELOPMENT OF CAMPUS TOUR GUIDE BASED ON
AUGMENTED REALITY***

ABSTRACT

The provision of information services about the Indonesian University of Education can be accessed through the campus website. However, the information displayed is in the form of text and images that are abstract in nature, so it does not display the actual situation in the real location. People who are visiting the Indonesian University of Education will experience difficulties in understanding the information for the first time. Presenting a tour guide is not efficient, because the performance of a human being as a tour guide is considered not consistent enough. One way to solve this problem is by utilizing augmented reality technology. This research will use markerless augmented reality technology with location based service which uses location coordinate data to bring up a 3D tour guide object. This android-based application was built using Unity3D and Mapbox as a framework for building location-based augmented reality. In the experimental results, this application can display a 3D model according to the specified location.

Keywords: augmented reality, tour guide, campus guide.

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