

**RANCANG BANGUN UPIGO SEBAGAI *CAMPUS TOUR GUIDE*  
MENGUNAKAN *AUGMENTED REALITY* BERBASIS ANIMASI**

**Skripsi**

*diajukan untuk memenuhi bagian dari syarat  
memperoleh gelar Sarjana Komputer  
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# **RANCANG BANGUN UPIGO SEBAGAI *CAMPUS TOUR GUIDE* MENGGUNAKAN *AUGMENTED REALITY* BERBASIS ANIMASI**

## **ABSTRAK**

Layanan informasi mengenai kampus Universitas Pendidikan Indonesia dapat diakses melalui situs web kampus. Namun, informasi yang diberikan bersifat abstrak dan sulit dibayangkan. Menghadirkan seorang *tour guide* kurang efisien, karena tidak semua pengunjung dapat mengingat semua informasi dan *familiar* dengan lingkungan kampus dalam waktu yang singkat. Maka dari itu, salah satu cara untuk mengefektifkan pengenalan kampus yaitu dengan cara memanfaatkan teknologi *augmented reality*. Dalam penelitian ini dilakukan rancang bangun aplikasi bernama UPIGO sebagai sarana pengenalan kampus Universitas Pendidikan Indonesia Bumi Siliwangi yang menggunakan *plugin AR + GPS* sebagai basis dari *augmented reality* dan basis navigasi *augmented reality*. Aplikasi UPIGO menampilkan model *tour guide* 3D beranimasi, *pinpoint*, serta *pop-up* mengenai informasi gedung yang dijadikan sebagai *point of interest* dan menampilkan navigasi dalam bentuk *augmented reality* agar dapat membantu pengguna menuju ke lokasi yang dituju. Aplikasi ini diuji dalam aspek fungsional menggunakan metode *blackbox testing* dan aspek *usability* menggunakan *System Usability Scale* (SUS). Hasil dari pengujian fungsional aplikasi ini sesuai dengan yang direncanakan dan hasil dari pengujian SUS mendapat rata-rata skor akhir senilai 69 yang berarti cukup baik.

Kata kunci: *tour guide, augmented reality, plugin, animasi, navigasi, point of interest, blackbox testing, System Usability Scale.*

# **DESIGN AND DEVELOPMENT OF UPIGO AS CAMPUS TOUR GUIDE USING ANIMATION-BASED AUGMENTED REALITY**

## ***ABSTRACT***

*Information services regarding the Universitas Pendidikan Indonesia campus can be accessed through the campus website. However, the information provided is abstract and difficult to imagine. Presenting a tour guide is less efficient because not all visitors can remember all the information and become familiar with the campus environment in a short time. Therefore, one way to streamline campus introduction is by utilizing augmented reality technology. In this study, the design of an application called UPIGO as a means of introducing the Universitas Pendidikan Indonesia Bumi Siliwangi campus was carried out using the AR + GPS plugin as the basis of augmented reality and augmented reality navigation base. The UPIGO application displays an animated 3D tour guide model, pinpoints, as well as pop-up regarding building information that is used as a point of interest and displays navigation in the form of augmented reality in order to help users get to their intended location. This application was tested in the functional aspect using the blackbox testing method and the usability aspect using the System Usability Scale (SUS). The results of the functional testing of this application are as planned and the results of the SUS test have an average final score of 69, which means it is quite good.*

*Keywords: tour guide, augmented reality, plugin, animation, navigation, point of interest, blackbox testing, System Usability Scale.*

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