

IMPLEMENTATION OF AUGMENTED REALITY AS A LEARNING MEDIA IN THE AUTOMOTIVE FIELD FOR VOCATIONAL STUDENTS USING THE SURF ALGORITHM

ALVIAN ANDHI GUNAWAN

*Informatics Study Program, Faculty of Science & Technology
University of Technology Yogyakarta
Jl. Ringroad Utara Jombor Sleman Yogyakarta
E-mail : alvianandhigunawan@gmail.com*

ABSTRACT

Learning media is a tool that can be used to channel information or material in the learning process. The learning process used by vocational school students, especially for automotive majors, still utilizes conventional methods by using the Microsoft Powerpoint application and modules as teaching aids in the learning process, which is considered less effective in presenting understanding of the learning material. Based on the problems faced, the researchers built a learning media application in the automotive sector, which utilizes Android-based Augmented Reality technology. Augmented Reality is a technology that can visualize the virtual world with the real world, in 2D or 3D in real-time. In the development of Augmented Reality technology applications, it is equipped with the Marker-based Tracking method, namely a method that takes the form of markers in the form of markers or images in which 3D objects are stored. The tools that will be used in developing Augmented Reality applications, which utilize Unity 3D software and the programming language used is C#. The final result of this research is an Augmented Reality application as a learning medium, which can assist in the learning process activities on the main components of car engines for vocational school students.

Keywords: *Learning Media, Augmented Reality, Markerbased Tracking, Android, Unity 3D.*