

# **VIRTUAL REALITY TECHNOLOGY USED TO DEVELOP DIDACTIC MODELS IN ENGINEERING EDUCATION**

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## **Abstract**

*The use of virtual reality techniques in the development of educational applications brings new perspectives to the teaching of subjects related to the field of civil construction. In order to obtain models, which would be able to visually simulate the construction process of two types of construction work, the research turned to the techniques of geometric modelling and virtual reality. The applications developed for this purpose are concerned with the construction of a cavity wall and a bridge. These models make it possible to view the physical evolution of the work, to follow the planned construction sequence and to visualize details of the form of every component of the works. They also support the study of the type and method of operation of the equipment necessary for these construction procedures. These models have been used to distinct advantage as educational aids in first-degree courses in Civil Engineering.*

## **Keywords**

Visual environments, didactic models, virtual reality, new learning techniques.