

## TEACHING THE MAGNETIC FIELD OF A BAR-SHAPED MAGNET USING AUGMENTED REALITY

Prof. Dr. Suzana da Hora MACEDO Rua Rodrigues Peixoto, 30 Parque Tamandaré – 28035-060 Campos dos Goytacazes, RJ, BRAZIL

Prof. M.Sc. Evanildo dos Santos LEITE Rua Rodrigues Peixoto, 30 Parque Tamandaré – 28035-060 Campos dos Goytacazes, RJ, BRAZIL

Prof. Filipe Arantes FERNANDES Rua Dr. Siqueira, 273 Parque Dom Bosco – 28030-130 Campos dos Goytacazes, RJ, BRAZIL

## **ABSTRACT**

It is proposed in this paper the use of an Augmented Reality environment developed to support the teaching of the magnetic field of a bar-shaped magnet. It was created a prototype with software based on Augmented Reality that has been tested with students of engineering. In this environment the student can see in 3D and interact with the magnetic field of a bar-shaped magnet. In a screen of Augmented Reality there is the simultaneous presence of real and virtual objects. In this work the magnetic fields are displayed, in the virtual world, which will be around a magnet, in the real world. From the results, analysis and evaluations were done to complete the work.

Key Words: Augmented Reality, Magnetic field, Teaching.