

3D Fan Hologram

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Abstract: *The currently secondary education needs the contribution of new techno-pedagogical resources, where the resource, teaching and learning skills are integrated to motivate students in their learning. For this reason, the field of holographic is presented as a dynamic alternative to the growing use of image projectors. However, these resources are not available to teachers and educational institutions because of their high costs. This research seeks to show how led-based technologies can be applied in secondary education, so allow the classroom attention of students and improve their interest in learning through the use of the 3D Holographic LED-Fan Display. In this way, the objective is to improve the student's motivation for learning using current resources according to the realities of the current context of education, which may not have availability of mobile devices due to their high costs, thus they have not been considered for the present study. The research approach is a mixed methodology combining qualitative and quantitative information through an educational study case applied to the Kléber Franco Cruz School with the intervention of pre-professional practices carried out by the Technical University of Machala in Ecuador, through the realization of an integrative knowledge project with students with different profiles according to their curriculum, in order to face the different challenges of teaching.*

Keywords: 3D hologram, led fan display

I. INTRODUCTION

Nowadays, technology is global and is growing fast, hence its close relationship with education in all areas and levels is something unavoidable. Currently, the influence of holographic resources is becoming more and more recurrent in educational institutions due to the ease of handling and the predisposition of students to learn. The title of this paper suggested a similarly exciting volume of collective topics. The lack of interest in the classes taught by the teachers and the absence of dynamic pedagogical resources do not help to motivate students' individual learning. Among some reviewed studies, it is necessary to highlight one: "Extending interest," it is established that the final component in the interest aspect is related to the design of activities which purpose is to catch/extend student's interest in the particular field after being immersive through the learning activity. Extending interest also predisposes students to reengage in similar activities which should rise the possibilities for new opportunities. Henceforth, this should be the right time where meaningfulness and self-directed learning enters into the field of an immersive learning process. The main intention is to assist the students in transforming their maintained situational interest into emergent individual interest

II. SCOPE OF PROJECT

The future of holography lies at the intersection of AI, digital human technology, and voice cloning. The consistent increase in worldwide computing power will allow for the creation of digital human models that will render at an ever-accelerating pace that will make them more and more difficult to tell apart from real ones.

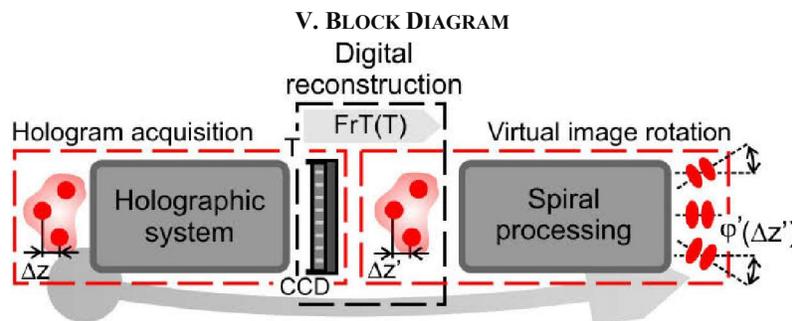
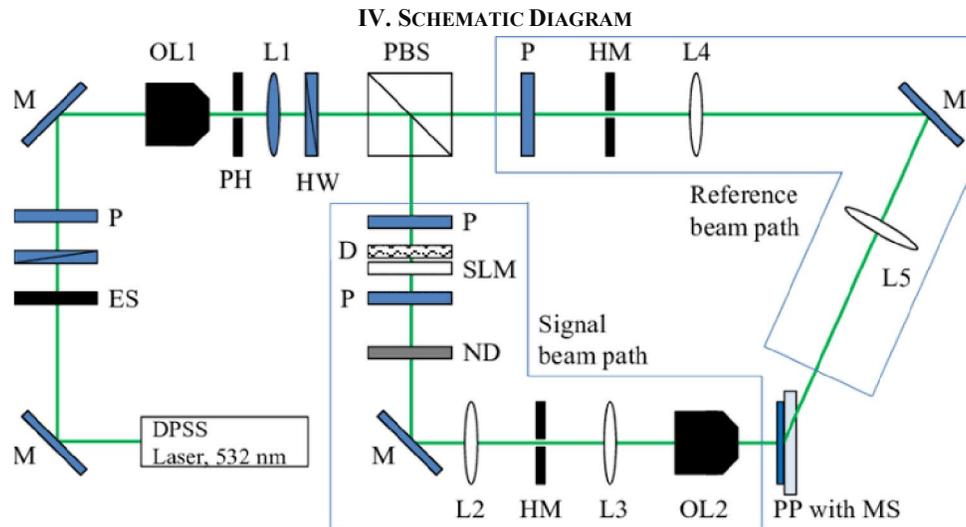
III. WORKING

So, how do holograms work? Holography is a unique method of photography whereby 3D objects are recorded using a laser and then restored as precisely as possible to match the originally recorded object. When illuminated via a laser, holograms are able to form an exact 3D clone of the object and duplicate its features.

In order to produce an accurate visualization of a hologram at a certain point in space, two light waves must be coordinated in motion - a reference wave and an object wave. Both are formed by separating the laser beam.

The reference wave is created directly by the light source, and the object wave is reflected from the recorded object. There is also a photographic plate on which dark stripes are "imprinted" depending on the distribution of electromagnetic energy (interference) in a given place.

A similar process takes place on ordinary photographic film. However, to reproduce an image from it, a printout on photographic paper is required. However, during the active use of hologram technology, everything happens a little differently.



Block diagram with three basic parts of the holographic localization of point-like objects by the diffraction-free vortices: optical hologram acquisition, digital hologram reconstruction and conversion of the holographic images to the vortex spots whose angular rotation indicates axial position.

VI. ALGORITHM

1. Switch on the Power.
2. Copy the software to computer
3. Double click on exe.file
4. Import video and play.

VII. RESULT



Normally it shows time and when we press and hold the button it switches to heart rate monitoring. The smartwatch collects data of heart rate and Spo2 through MAX30100 sensor and displays it on OLED

VIII. CONCLUSION

The magic of the animation becomes perfect when a real object serves as a reference inside the system. This can be a product, some 3D lettering, or a seemingly simple base. This is how an illusion with a WOW effect is created that is a delight to all who see it. The 3D hologram is tested live on the hologram projector selected by the particular customer, with the aim of guaranteeing high quality and achieving an optimal result. Depending on the hologram projector selected, it can be set up by the customer, the stand constructor, or by a special technical team in the case a large-scale hologram projector.

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