

Proposition of an Intelligent System Based on the Augmented Reality for Warehouse Logistics

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Abstract : Increasing productivity and quality of service, improving the working comfort and ensuring the efficiency of all processes are important challenges for every warehouse. The order picking is recognized to be the most important and costly activity of all the process in warehouses. This paper presents a new approach using Augmented Reality (AR) in the field of logistics. It aims to create a Head-Up Display (HUD) interface with a Warehouse Management System (WMS), using AR glasses. Integrating AR technology allows the optimization of order picking by reducing time of picking process, increasing the efficiency and delivering quickly. The picker will be able to access immediately to all the information needed for his tasks. All the information is displayed when needed in the field of vision (FOV) of the operator, without any action requested from him. These research works are part of the industrial project RASL (Réalité Augmentée au Service de la Logistique) which gathers two major partners: the LAGIS (Laboratory of Automatics, Computer Engineering and Signal Processing in Lille-France) and Genrix Group, European leader in warehouses logistics, who provided his software for implementation, and his logistics expertise.

Keywords : Augmented Reality (AR), logistics and optimization, Warehouse Management System (WMS), Head-Up Display (HUD)

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