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Low cost augmented reality and RFID application for logistics items visualization

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Abstract

One important component of the gross domestic product (GDP) is logistics services the quality and added value of which is growing due to the application of modern information and communication technologies and electronics. RFID use increases the performance of logistics items identification, however some errors, which could cause substantial damage and losses, remain. The amount of potential errors could be diminished by the additional checking of items using 3D visualisation. The authors researched the use of augmented reality for item visualisation in a warehouse combining AR and RFID solutions.

1. Logistics and identification

The Council of Supply-Chain Management Professionals estimated that in 2009 the amount of logistics services in the gross domestic product (GDP) of USA reached 7.7%, but 7.15% in Europe[1]. European Commission structures believe that about 10-15% of all product expenses can be attributed to logistics services[2].

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