AUTOMATIC IDENTIFICATION AND CHARGING SYSTEM FOR CONSUMPTIONS

Description:

The present invention provides a system for automatic identification and collection of consumptions, comprising means for processing information configured to identify, from a captured image, the at least one product contained therein and to calculate the price of the at least one product; in addition to a charging device connected to the means to process information. Although a detection module similar to other systems is used, the ultimate objective of the patented system is to optimize the payment of a catering service by placing the products to be consumed on a tray, obtaining their price automatically and making payment by card. credit, without human intervention for it.

Keywords:

Computer Vision, Object Classification, Autoservicio, Sale And Collection, Hospitality, Consumption

Sectors:

ICT, Engineering, Others

Areas:

Hardware / Devices / Components, Software / Procedures, Industrial, Food, Technological Improvements, Recognition and detection system, Hostelry

Advantages:

There are industrial inspection systems to detect parts on conveyor belts, but they are usually systems that recognize parts with a well-defined and well-known shape and size. The patented system allows to detect the consumptions that can have very different aspects depending on the way of cooking and presenting the food. Most solutions similar to our proposal use classical computer vision and statistical analysis techniques, while in this case deep learning techniques are applied, specifically convolutional networks (which are a more recent methodology) for the detection of elements in the image (consumer items). In addition, the system is fully adapted to the restaurant establishment or end user, so in a previous configuration stage, the detected dishes and / or foods are paired with the retail price in said establishment.

Uses and Applications:

The present invention belongs to the hospitality and consumer sector, specifically to the field of automatic product identification and order management. The invention is applicable in various sectors, such as in the catering equipment sector, and in particular in identifying products that appear on a self-service tray and calculating their price.

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