Research

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A machine learning based intelligent vision system for autonomous object detection and recognition

Abstract Summary:

This source presents a “novel fast” algorithm for visually salient object detection. It takes into account real-world illumination conditions. The algorithm performance is benchmarked on MSRA Salient Object Database and implemented on a humanoid robot. fully autonomous robots rely on perception for spacial awareness and object recognition. Overview of their system is as follows: some unknown object is learned by extracting its features. Then, any future objects will be recognized. Overall, this system is explained in two parts: image capture and segment image units. The first construct a saliency map where regions of the images are highlighted as important. As more and more images are captures and processed, a kind of “visual memory” is kept on-line the system for future referencing [1].

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A General Framework for Object Detection

Abstract summary:

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Emergency Vehicle Detection

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