METHOD FOR DETERMINING CONFIDENCE OF A DISPARITY MAP

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The invention relates to a method and a sensor system of the mentioned type, designed in particular for determining the confidence of disparity maps inferred by a stereo algorithm or a network through a neural network capable of self-adapting.

Protection: Italy (with possibility to extend internationally)

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INVENTION

There are in the market several systems for acquiring images in 3D, in order to determine the depth of an image and stereo is one of the most popular strategies to accurately perceive the 3D structure of the scene, through synchronized cameras and several algorithms.

The invention relates to a method and a sensor system, designed in particular for determining the confidence of disparity maps inferred by a stereo algorithm or a network through a neural network capable of self-adapting, but which can be used for any type of image acquisition system, in which it is necessary to estimate the confidence, thus determining the level of certainty or uncertainty of each pixel of said image.

ADVANTAGES

- High reliability;
- Easy to implement;
- Competitive in terms of costs;
- No systems constraints.

APPLICATIONS

- Autonomous driving systems;
- Computer Vision;
- Robotics;
- Augmented Reality,
- 3D reconstruction.



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CONTACTS

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