

METHOD FOR DETECTING AN OBJECT AND METHOD FOR TRAINING A DETECTION NEURAL NETWORK

ABSTRACT

A computer-implemented method for detecting an object includes extracting features from an image. The method further includes determining, for each pixel of the image, a depth estimation, based on the extracted features to generate a depth map. The method further includes determining, for each pixel of the image, an uncertainty value of a respective depth estimation, to generate a depth uncertainty map. The method further includes generating a point cloud representation of the image. Each data point in the point cloud includes a respective depth estimation and a corresponding uncertainty value. The method further includes detecting an object represented in the image based on the point cloud representation, using a detection neural network.

FIG. 4