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(54) Title: ANOMALY DETECTION METHOD AND APPARATUS, AND ELECTRONIC DEVICE AND STORAGE MEDIUM

(54) 发明名称: 异常检测方法和装置、电子设备以及存储介质

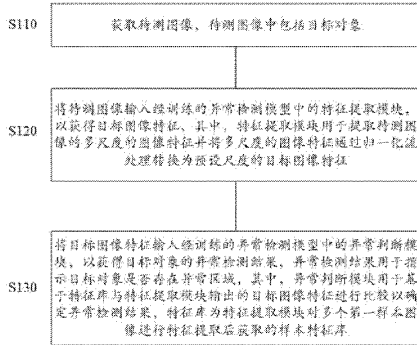


图 1

- S110 Acquire an image to be subjected to detection, wherein said image comprises a target object
- S120 Input said image into a feature extraction module in a trained anomaly detection model, so as to obtain a target image feature, wherein the feature extraction module is used for extracting multi-scale image features of said image and converting the multi-scale image features into a target image feature of a preset scale by means of normalization flow processing
- S130 Input the target image feature into an anomaly determination module in the trained anomaly detection model, so as to obtain an anomaly detection result of the target object, wherein the anomaly detection result is used for indicating whether there is an abnormal area in the target object, the anomaly determination module is used for making a comparison on the basis of a feature library and the target image feature which is output from the feature extraction module, so as to determine the anomaly detection result, and the feature library is a sample feature library acquired after the feature extraction module performs feature extraction on a plurality of first sample images

(57) Abstract: Provided in the embodiments of the present application are an anomaly detection method and apparatus, and an electronic device and a storage medium. The method comprises: acquiring an image to be subjected to detection; inputting said image into a feature extraction module in a trained anomaly detection model, so as to obtain a target image feature; and inputting the target image feature into an anomaly determination module in the trained anomaly detection model, so as to obtain an anomaly detection result of a target object, wherein the anomaly detection result is used for indicating whether there is an abnormal area in the target object, the feature extraction module is used for extracting multi-scale image features of said image and converting the multi-scale image features into a target image feature of a preset scale by means of normalization flow processing, and the anomaly determination module is used for making a comparison on the basis of a feature library and the target image feature which is output from the feature extraction module, so as to determine the anomaly detection result. The method can be applied to anomaly detection in a scenario with a variable background, and by means of the method, anomaly detection at a high resolution can also be realized.

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SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ,
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本国际公布:
— 包括国际检索报告(条约第21条(3))。

(57) 摘要: 本申请实施例提供一种异常检测方法和装置、电子设备以及存储介质。该方法包括: 获取待测图像; 将待测图像输入经训练的异常检测模型中的特征提取模块, 以获得目标图像特征; 将目标图像特征输入经训练的异常检测模型中的异常判断模块, 以获得目标对象的异常检测结果, 异常检测结果用于指示目标对象是否存在异常区域; 其中, 特征提取模块用于提取待测图像的多尺度的图像特征并将多尺度的图像特征通过归一化流处理转换为预设尺度的目标图像特征, 异常判断模块用于基于特征库与特征提取模块输出的目标图像特征进行比较以确定异常检测结果。该方法可以适用于背景多变的场景下的异常检测同时还可以实现高分辨率下的异常检测。