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(54) Title: DATA PROCESSING METHOD AND RELATED APPARATUS, AND DEVICE AND STORAGE MEDIUM

(54) 发明名称: 一种数据处理的方法、相关装置、设备以及存储介质

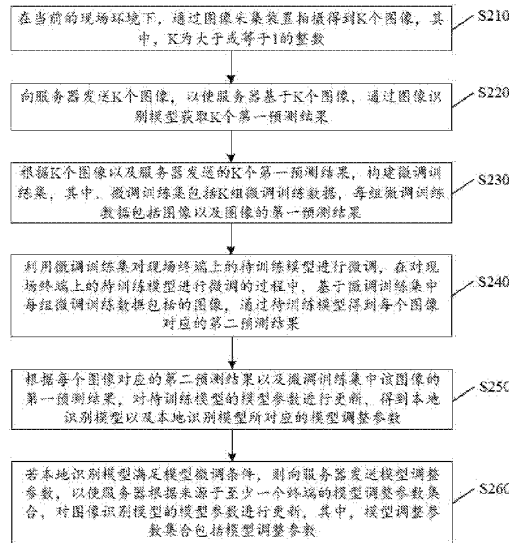


图 3

S210 Capture K images in the current site environment by means of an image collection apparatus, wherein K is an integer greater than or equal to 1

S220 Send the K images to a server, such that the server acquires K first prediction results on the basis of the K images by means of an image recognition model

S230 Construct a fine-tuning training set according to the K images, and the K first prediction results, which are sent by the server, wherein the fine-tuning training set comprises K groups of fine-tuning training data, and each group of fine-tuning training data comprises an image and a first prediction result of the image

S240 Use the fine-tuning training set to perform fine tuning on a model to be trained on a site terminal, and during the fine tuning of the model to be trained on the site terminal, on the basis of the image comprised in each group of fine-tuning training data in the fine-tuning set and by means of the model to be trained, obtain a second prediction result corresponding to each image

S250 According to the second prediction result corresponding to each image and the first prediction result of the image in the fine-tuning training set, update model parameters of the model to be trained, so as to obtain a local recognition model and model tuning parameters corresponding to the local recognition model

S260 If the local recognition model meets a model fine-tuning condition, send the model tuning parameters to the server, such that the server updates model parameters of the image recognition model according to a set of model tuning parameters from at least one terminal, wherein the set of model tuning parameters comprises the model tuning parameters

(57) Abstract: Disclosed in the present application are a data processing method and related apparatus, and a device and a storage medium. The method comprises: sending to a server K images which are captured in the current site environment, and the server acquiring K first prediction results by means of an image recognition model; constructing a fine-tuning training set according to the K images and the K first prediction results; by means of a model to be trained, acquiring a second prediction result of each image in the fine-tuning training set; according to the second prediction result of each image and a first prediction result of the image in the

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PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW。

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fine-tuning training set, updating model parameters of the model to be trained, so as to obtain a local recognition model and model tuning parameters; and if a model fine-tuning condition is met, sending the model tuning parameters to the server, and the server updating model parameters of the image recognition model according to a set of model tuning parameters. Thus, the present application enables an image recognition model to be applicable to various site environments, improves the precision of model recognition, and also saves on processing resources of a server and improves the efficiency of model learning.

(57) 摘要: 本申请公开一种数据处理的方法、相关装置、设备和存储介质, 向服务器发送在当前的现场环境下拍摄的K个图像, 服务器通过图像识别模型获取K个第一预测结果; 根据K个图像和K个第一预测结果构建微调训练集; 通过待训练模型获取微调训练集中每个图像的第二预测结果; 根据每个图像的第二预测结果和微调训练集中该图像的第一预测结果, 对待训练模型的模型参数进行更新, 得到本地识别模型和模型调整参数; 若满足模型微调条件, 向服务器发送模型调整参数, 服务器根据模型调整参数集合, 对图像识别模型的模型参数进行更新。由此使图像识别模型适用各种现场环境, 提升模型识别的精度, 而且节省服务器的处理资源, 提升模型学习的效率。