

海量信息检索挖掘及视觉三维展现方法仿真

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摘要: 为了提高网络中海量信息检索挖掘的效率和准确率, 提出一种基于分布式处理技术的结构化的海量信息检索挖掘及视觉三维展现方法. 利用分布式检索系统的 MapReduce 引擎, 能够实现海量图像信息相似性度量的检索挖掘; 利用 MapReduce 检索挖掘模型中的映射和约简操作过程, 能够对图像相似性的度量进行运算, 并对特征相识度相同的图像进行合并; 利用 SIFT、HOG 和颜色矩这 3 个特征参数构成的图像特征向量, 构建与图像特征对应的视觉和语义词汇, 实现检索结果的三维可视化展示. 仿真结果证明, 改进算法进行海量信息检索挖掘耗时短、准确率高.

关键词: 结构化; 海量信息; 视觉展示

Structured Huge Amounts of Information Retrieval Mining

Technology and Visual Display of 3D Technology

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Abstract: In order to improve the efficiency and accuracy of massive information retrieval and mining in the network, a new method based on distributed processing technology is proposed.

Using distributed retrieval system of MapReduce engine, to achieve mass image information measure of searching for similar; using the MapReduce retrieval by mining model mapping and reduction operation process, can the image similarity metric operations, and the feature met with image merging; using sift and hog and color moments of the three characteristic parameters of image feature vector construct 3D visualization and image features corresponding to visual and semantic vocabulary, achieve the retrieval result display. The simulation results show that the improved algorithm is time-consuming, high accuracy and high accuracy.

Key words: structured; huge amounts of information; visual display

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