Abstract

A novel mosaic technique based on Strip Search Algorithm is proposed that improves non-linearity, accuracy and vertical distortions possibly found in mosaic image. Strip Search
Algorithm based on novel measure of Relative- Sum of the Squared Difference (R-SSD) is proposed to search particular strip of frame within its specified portion and it is used for normalization and simplification of some important steps of image mosaic. Steps like key frames selection, frames registration, their transformation and combination are suggested for mosaic creation. An optimal criterion is suggested for key frames selections. Hierarchical Seam Line Estimation and Vertical Strip Registration are introduced for precise image warping and distortion-less vertical transformation. Structural linearity, precision and non-deformation property reflects from mosaic results of proposed algorithm.

Reference

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Image Mosaicing with Strip Search Algorithm based on a Novel Similarity Measure

Technology and Application (ICITA05), 2005.
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Index Terms

Computer Science Image Processing

Key words
Image stitching Image registration Similarity measure
Key frame selection