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Author: Dr. Tahir Mushtaq
University of Management and Technology (UMT), Pakistan, g.jaffer@yahoo.com

Ms. Sana Amanat
Queen Mary College Lahore, Pakistan, sana.amanat.07@gmail.com
Mr. Ali Yousaf
Pakistan, aliyousaf550@hotmail.com
Dr. Ghulam JAFFER
University of the Punjab, Pakistan, g.jaffer@yahoo.com
Dr. Nazish RUBAB
Institute of Space Technology (IST), Pakistan, DrNRubab@gmail.com

SPATIO-TEMPORAL BASED FRAMEWORK FOR VIDEO RETRIEVAL SYSTEM

Abstract

Due to exponential growth in multimedia data, Spatio-Temporal based various video retrieval system are designed. But these systems are fiasco to model temporal feature of videos appropriately. To cope up this limitation, a hybrid approach of various spatial feature extraction algorithms with temporal information tracking is proposed in this research paper. The hybrid/ fusion of Scale Invariant Feature Transform (SIFT), Covariant Feature Detector (CFD) and Lucas-Kanade sparse optical flow method was developed. This approach was testified and verified using standard video retrieval data set TRECVID 2014 and the results were found to be robust to noise. Moreover, the system performance was above expected value alongwith accuracy around 81%.