Sensitivity Character Graph Analysis and its Robustness to Intrusion

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Abstract--The day we come across is so called motto of digital age, where technology is the most crucial and called as digital revolution decade technology. As of digitalization enhances the way we use the technology and its aspect like snaps, videos and many more, hence it needs related aspects like quality in terms of picture, contrast and many more. In order to provide all the above quality, it needs high updated technology with the most amazing facts of like robustness and optimization. In this paper, we implemented the two algorithms to estimate and measure the and improve the quality of optimization of motion picture or genera, where Brick based algorithm takes each snap to each slice and calculates the pixel to implement the duality mechanism of motion when same image like to appear in one form where we calculate pixel of optimization to lead to high accuracy in terms the sets of relative assumption. Hence, Robustness to the sensitivity charter graph leads to the next level of high optimization and keeping mind the intrusion like noise and other external media to optimize the best of the Robustness.

Keywords: Sensitivity Character Graph, Robustness, Optimal Graph

1. Introduction

In general, if we consider the point "Sensitivity analysis" in which we likely to take the priority of key quantitative assumptions and the computations need to be changed systematically to assess their effect on the final outcome in terms of high quality. The technology Employed commonly in evaluation of the overall risk or in identification of critical factors, it attempts to predict alternative outcomes of the same course of action which need to be in the comparison, contingency analysis uses qualitative assumptions to paint different scenarios or snaps and videos. As of technology always needs some formulating method s like Graph that plots the results of various assumptions on the final outcome in a high typical and sensitivity analysis to predict the best solution.

As of we know technology is the most crucial part in this digital world to make the solution in the best easiest possible method where we keep stressing on the "Sensitivity analysis " computing the effect of changes in inputs on model predictions. Photographs and motion picture have to be predicted with the flow motion of edge angle and vertices.

'Imagination is more important than knowledge. Knowledge is limited. Imagination encircles the world.'
Albert Einstein

This may be due to the schematic aspect of the model and the difficulty to segment accurately the image into meaningful entities. Therefore, in these cases no isomorphism can be expected between both graphs, and the graph matching problem does not consist in searching for the exact way of matching vertices of a graph with vertices of the other, but in finding the best matching between them.

In this paper, Many fields such as computer vision, scene analysis, chemistry and molecular biology have applications in which images have to be processed and some regions have to be searched for and identified as per the requirement of the client or whatever the beset for the context. When such processing is to be performed by a computer automatically without the assistance of a human expert, the beat and most best useful way of representing the knowledge is by using graphs. Considering Graphs have been proved as an effective way of representing objects in terms f vertices and edges to provide the best equips methods to predict and the area of proving the solution. Considering the snap or motion picture, if we take which potion and which object needs to analyze that will be decided band traced by the help graph.

Fig.1.1 Showing the Different snaps of the motion of TV Program.

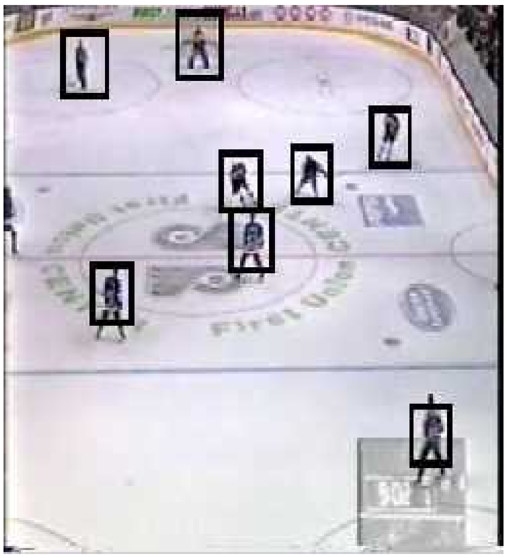
In the above fig.1.1, showing the different snaps of different pixel and the detection mechanism to localize and recognize frontal faces, where there are merely 1-2 faces per frame. In this introduction part of the paper, the term inexact applied to some graph matching problems means that it is not possible to find an isomorphism between the two graphs to be matched.

2. Related work

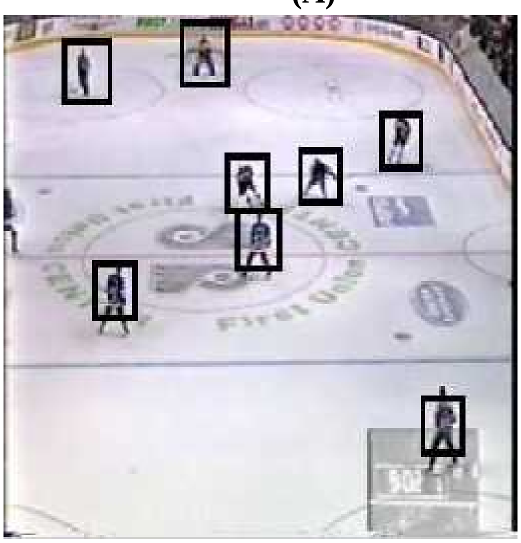
The technology of digital age has changed the way of the life style making a sensible and providing the most productive solution for the society. In order to analyses the methods which already been proposed we have taken some of the quality consideration and aspects in terms of high quality contrast of keeping thought in mind of automation. The snaps we have taken for consideration of the fact of quality in computational environmentis complex and making with digital age technology to provide next level of solution of dual contrast in terms of motion. Hence, in order to provide the best technology solution we need many methods and perspective idea gas already been proposed, some of the related methods are listed as follows.

2.1 Graph representation using Attributed fuzzy set theory

The best way of approaching is the Fuzzy set theory has been used in the literature as a means to create vertex and edge attributes to be applied to graph matching. At a theoretical level there are many key works for these types of attributes, such as the representation of distances in images and the representation of relative positions between objects. Based on this idea, we can find many references in the literature using this type of attributes for inexact graph matching.



(A)



(B)

Fig. 2.1.1 Two Snaps having different posture edges of same picture

2.2 Graph matching and elastic graph matching in the Morphological context

As of the technology in the field of computer science is always a chaining context regarding the high perspective to easy and user flexible solution. In order to provide the face matching concept, another usual application of this technique is the authentication of human faces, where the deformation patterns of the face are represented as graph attributes. The different facial expression and the rotation patterns of the human head are intended to be represented in the form of graphs. Wavelet transforms are also used for creating the elastic face graph model, such as in where the face graph model is constructed using the discrete wavelet transform, and in, where different 2D Gabor wavelet representation are used. Taking consideration to the other aspect another related problem is the recognition of facial regions such as mouth and nose, which is also, solved using these methods.

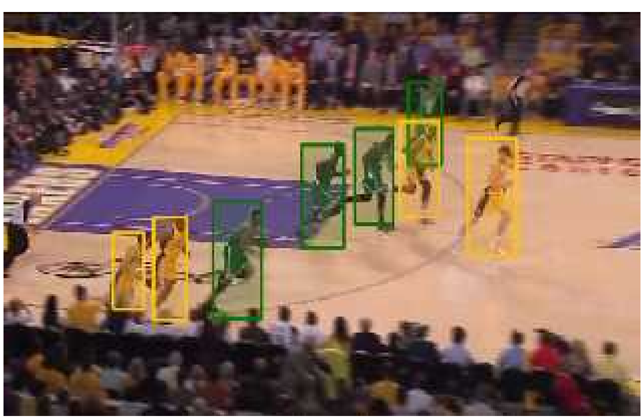
3. Methods

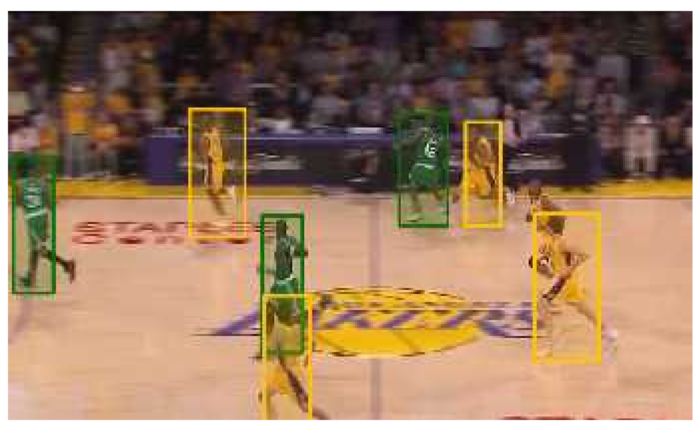
The proliferation and Visual motion is a compelling cue to the structures and dynamics of the world around us. In order to provide the best solution methodology analysis is crucial to many key problems in today's vision research such as object/environment/human modeling, video compression, event analysis and image-based rendering.

3.1 Dual Context -Robust Adaptive Scheme.

Digital revolution and videos filmed with a single pan-tilt-zoom camera has many applications, but it is also a challenging problem. Gradient-based optical flow estimation techniques essentially consist of two stages: estimating derivatives and organizing and solving optical flow constraints (OFC) and lastly rely on their short-term motion patterns. Both stages pool information in a certain neighborhood and are regression procedures in nature. Least-squares (LS) solutions to the regression problems break down in the presence of outliers such as motion boundaries. To cope with this problem, a few robust regression tools have been introduced to the OFC stage. The homography estimation is solved by using a variant of the Iterated Closest Points. Unlike most existing algorithms that rely on matching robust feature points, we propose to match edge points in two images

Fig.3.1 (A) **(B)**





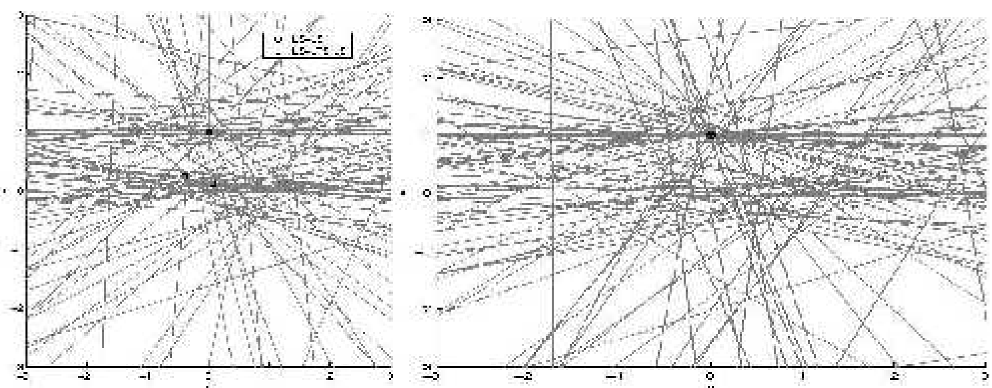
(C) **(D)**

Fig.3.1.1 Showing Different Category of Automating the groups based on the color

In the above fig.3.1.1 (A) different patriotic color graph classification and fig.3.1.1 (B) next level of motion and color portion with respect to the automation mechanism best on color mechanism emphasize the central regions that most likely have jersey colors, we apply a Gaussian kernel centered in the detected bounding box to re-weight the color histogram.

3.2 Adaptive High-Brick Robust Methods for Visual Mapping and Construction

Visual mapping and construction is the process of recovering the underlying true visual field from a noisy observation which includes many fundamental tasks in early vision such as image restoration, 3D surface reconstruction, stereo matching and optical flow estimation and sensitive character graph analysis .The slicing of the image and permits the reconstruction is the piecewise continuity property of a visual field, which is often imposed by local parametric models. In recent years, many robust methods have been employed to solve the associated regression problems; among them, those based on high-brick robust criteria], e.g. least-median-of-squares and least-trimmed-squares, have reported the best accuracy.High-Brick robust criteria usually have no closed-form solutions, so certain approximation schemes must be used.



(A) **(B)**

Fig. 3.2.1 cluster plots at three typical pixels.

Different approximation methods may lead to very different accuracy and convergence rate; and research is still going on in the statistics community to find more appropriate methods .What is needed, in order to circumvent the efficiency-accuracy predicament, is an adaptive scheme which performs least-squares estimation when no outliers are present and in- creases the p value as the noise contamination becomes more severe. This does not seem possible for an isolated regression problem in which no prior information about outlier contamination is available. But in visual reconstruction problems, we can exploit the piecewise- smooth property of visual surfaces to achieve the addictiveness. Linear Programming Relaxation algorithm is for predicting the best face identification in a video clip.

Adaptive algorithm for high-brick robust estimator's

1. //Considering the snaps of best to Robustness for the pixel.
2. For all pixels f and Image, Video(Motion)
3. Compute LS; //least square
4. Estimate VLS as V;
5. Weighted least-squares (WLS) on VLS;
6. {
7. Do
8. {
9. Pixel=n;
10. Find Edge E;
11. Vertices V;
12. while #fpixels updated <=0
13. }
14. for all pixels f in Image,
15. for all its neighbors V and f
16. if ((n) updated and Vn (V j > T)
17. {
18. V_{try};
19. F_{try} ;
20. WLS on Vn;
21. if (Ftry< F)
22. update V;
23. }
24. }
25. Consider a system relating the output y to the input x by the function
26. y = f(x):
27. Generally f(¢) is nonlinear; but when the perturbation ¢x is small enough to ¯t its linear
28. range, the output error is well approximated by
29. ¢y =
30. df(x)
31. dx
32. ¢x:
33. Then the covariance of the output is
34. §y = (
35. df(x)
36. dx
37.)0§x
38. df(x)
39. dx
40. f(¢) of most real systems cannot be expressed explicitly.
41. }

4. Conclusion

The system possesses the ability to detect and track multiple snaps of various colors and sizes with variation of contrast of motion, estimates the homography between video frames and the court, and identifies photos. Hence in this paper, the system o falgo0tirm emphasis on the optimality on the

motion picture taking the various angles of edges with the contrast mechanism of auto character matching concept. The optical flow estimation and motion-based detection and tracking have been proposed for estimating piecewise-smooth optical flow. Hence, keeping the aspect of optimization of the snaps in motion which lead us to next level research of doing the interactive of coupling image transformation and its optimization effect of is towards the high end robustness.

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