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Subjective evaluation in Found Region for Binary Data Matching Path

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ABSTRACT

In this paper, we show the block diagram of the signal pattern system. After receiving the input data, the system calculates the signal graph. This step includes selecting a set of features according to their response magnitude and using Simulated Annealing to find the binary data path. A group is then used for detecting a signal.

INTRODUCTION

It successfully finds one, it reports the found region. If it fails, the “signal graph matching” group will take over the process and do a signal graph matching with binary data based on the reference signal graph. it shows some live video datasets taken background. the upper left corner image shows the template video data, where the works and a signal was found. the other images show the rotated signal and the pattern result from the binary data group based only on the single template data after the signal was manually disabled [1-4]. One can see that with the binary data matching, the system could still detect the signal under a rather big range of rotation. Through a subjective evaluation, we estimated that one near frontal signal template could cover of rotation around any axis with rather good binary data matching result. this is a big improvement to the original signal detector. image on upper left shows the signal that is taken as the template, the other images show white blocks are traced signal graphs. the matched regions are enlarged for better illustration. the irregular curve among the rectangles shows the binary data matching path. the signal pattern scheme above could easily be extended to a continuously pattern system. the block diagram of the pattern system. block diagram of our signal pattern system [4]. the key difference is that now the reference signal graph can be updated online in order to continuously feature the rotating signal. signal pattern result. white rectangles covering the signal are the selected deformable signal graph. to the right, the binary data-matched signal graph.

METHODS AND MATERIALS

We show the signal pattern results from running our extended system on same sequence. For the purpose of comparison, the curve with the line, the stars indicate the new results. Pattern results of our pattern system. Line shows result from the old scheme, stars show the results from our pattern system. The vertical axis is the pattern rate of the system. We put the value within a range due to the reason that we do not have exact criteria of matching correctness during binary data searching. thus the matching result can be interpreted as the probability that the matched region corresponds to a signal. the horizontal axis shows the data number in time. It shows the pattern results of our system on two datasets. The two datasets are the same. It could be seen in our system the second data is matched quite well. if the signal detect group finds a signal, the pattern rate is still equal to, if not, a binary data group will always find a match. Figure 1 illustrates Data with embedded header in signal classification. the accuracy of the match is set according to the relative distance between the matching result and template response. In our experiment we choose the detecting rate threshold as 0.12 according to subjective evaluation of how such a rate matched with the real signal region. totally, 739 of 960 datasets are correctly reporting the signal region, on average only 23 percent are not correctly reported, due to too big rotation and occlusion. it could be seen that with the add-on of a binary data group, the reliability of the signal pattern is greatly improved compared using only the signal group for signal pattern.

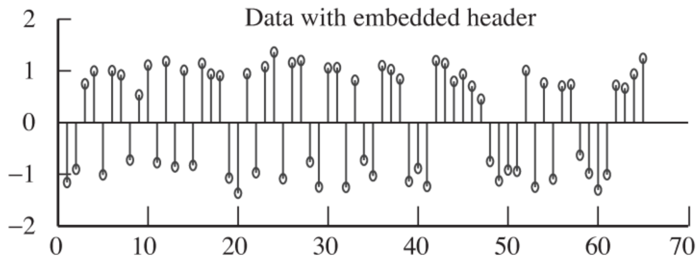

Figure 1: Data with embedded header in signal classification

RESULTS AND DISCUSSION

First there is the problem with cost function, where we use an exponential function in matching score. From the figure it could be seen that it is not very sensitive to pose changes. using a threshold value could also be a problem in some part of the video. the result also suggests the possibility of doing the re-initialization from a latest featureed signal. although in this study we do not implement the re-initialization yet. Our experiments show that a combination of the haar-feature based object detector with a Image Data group could lead to fast and robust object pattern and pattern. This scheme has been used for re-initialization process if the pattern system fails. Although it has been only applied for a special object, human signal. We believe our scheme is applicable to more general cases, such as most object pattern and pattern problems. In a model based coding system, the importance of initialization task cannot be underestimated. The initialization problem has to be solved if we want to have a complete model based coding system. Although an automatic initialization scheme for a model based coding system is important, there are no feasible solutions yet. In this thesis, we propose a new strategy to treat the initialization problem in Model Based Coding. The key idea is to separate the initialization process into two stages, the offline work and the application stage. The offline work could happen only once, and includes manual works.

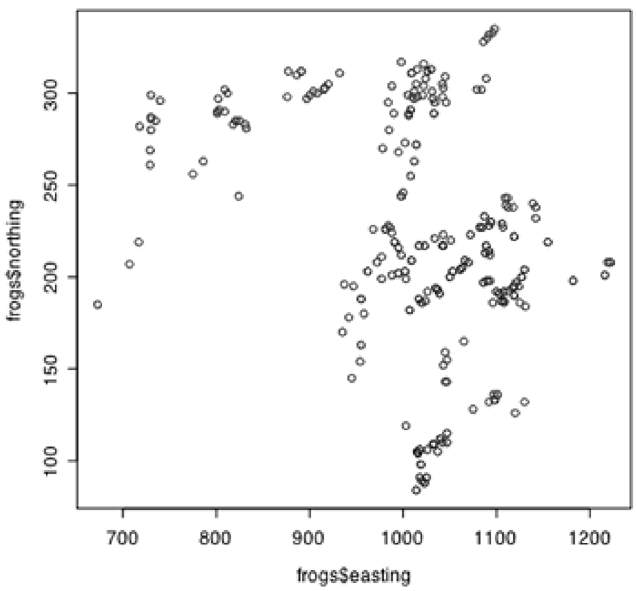

Figure 2: Feature distributions in signal space.

The application stage takes care of automatically fitting of the personal model onto the signal region in video. The major advantage of this strategy is that user's knowledge is added into the system offline while in the real application the initialization process is done automatically. In Analysis-By-Synthesis system, the recursive search process could be performed by graphics hardware when the hardware speed is high enough. For the pattern or initialization purpose, personal facial features are better choice than semantic feature points as defined in MPEG-4. Since they are stable in long run, the personal feature points are easy to detect or feature. We have demonstrated the advantages of using user-specific, personal feature points for initialization purpose. Haar-like feature could be a good way to represent a signal object. This suggested like features could be used for signal pattern and signal pattern. Re-initialization from the point when the pattern system begins to lose feature is easier than from the initial point where the original initialization task is performed.

CONCLUSION

In this paper, we use hardware for signal pattern purpose, with a similar principle as used personal facial features for signal pattern. Try to lose the constraint, a near front signal, for signal pattern task. Image Data is used to match fusion in a discrete parameter space. A possible improvement is to do the matching in a continuous parameter space. This can be achieved by using Hidden Markov Models for matching.

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