

Dual Histogram of Relative Optical Flow based Feature Detection for Gait Recognition

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Research background

Silhouette based method is not promising and local feature based method has been proposed.

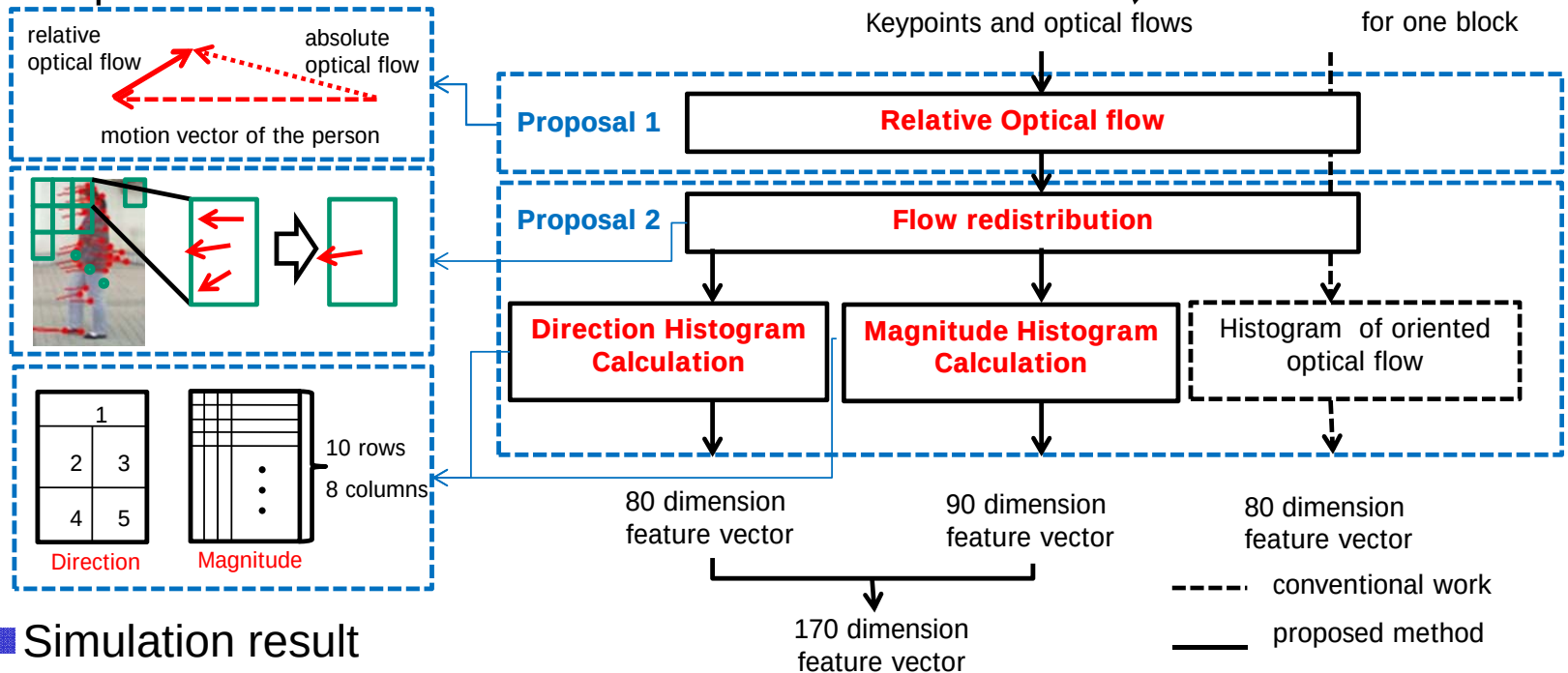
Target:

1. Improve the feature detection part of conventional feature based method.
2. Deal with high resolution video sequences.
3. Deal with the gait condition problems of clothes, speed and distance.

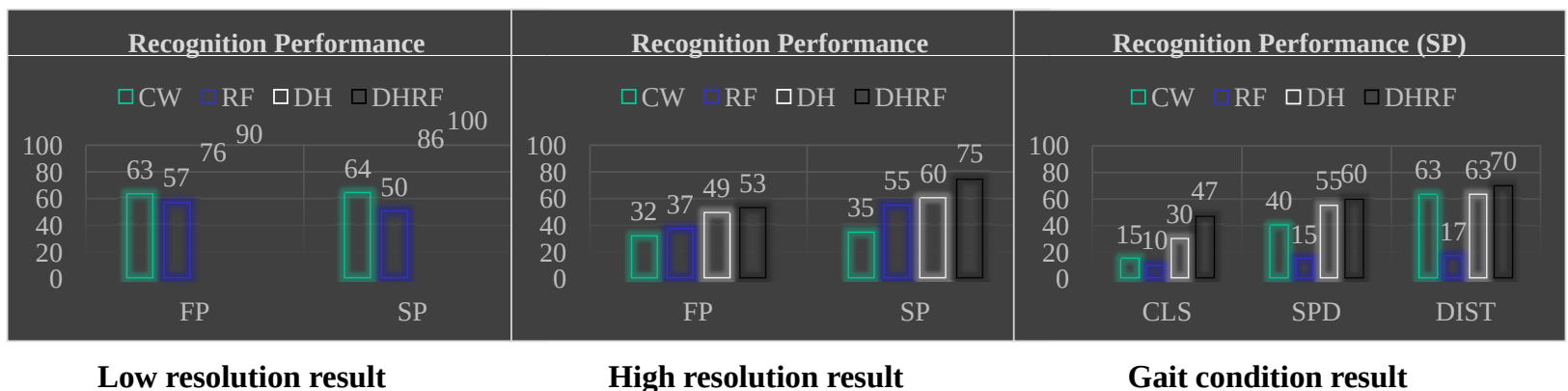
Conventional work

1. Keypoints of interest is used as input.
2. Histogram of oriented optical flow is used as gait feature.

Proposed method



Simulation result



Conclusion

Proposed method increases the recognition performance about 40% both for low resolution and high resolution cases., and reaches a performance of almost 100% for high resolution common case. In addition, it increases the recognition performance for different gait conditions, especially clothes case, 30% increased.



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