Person Re-identification

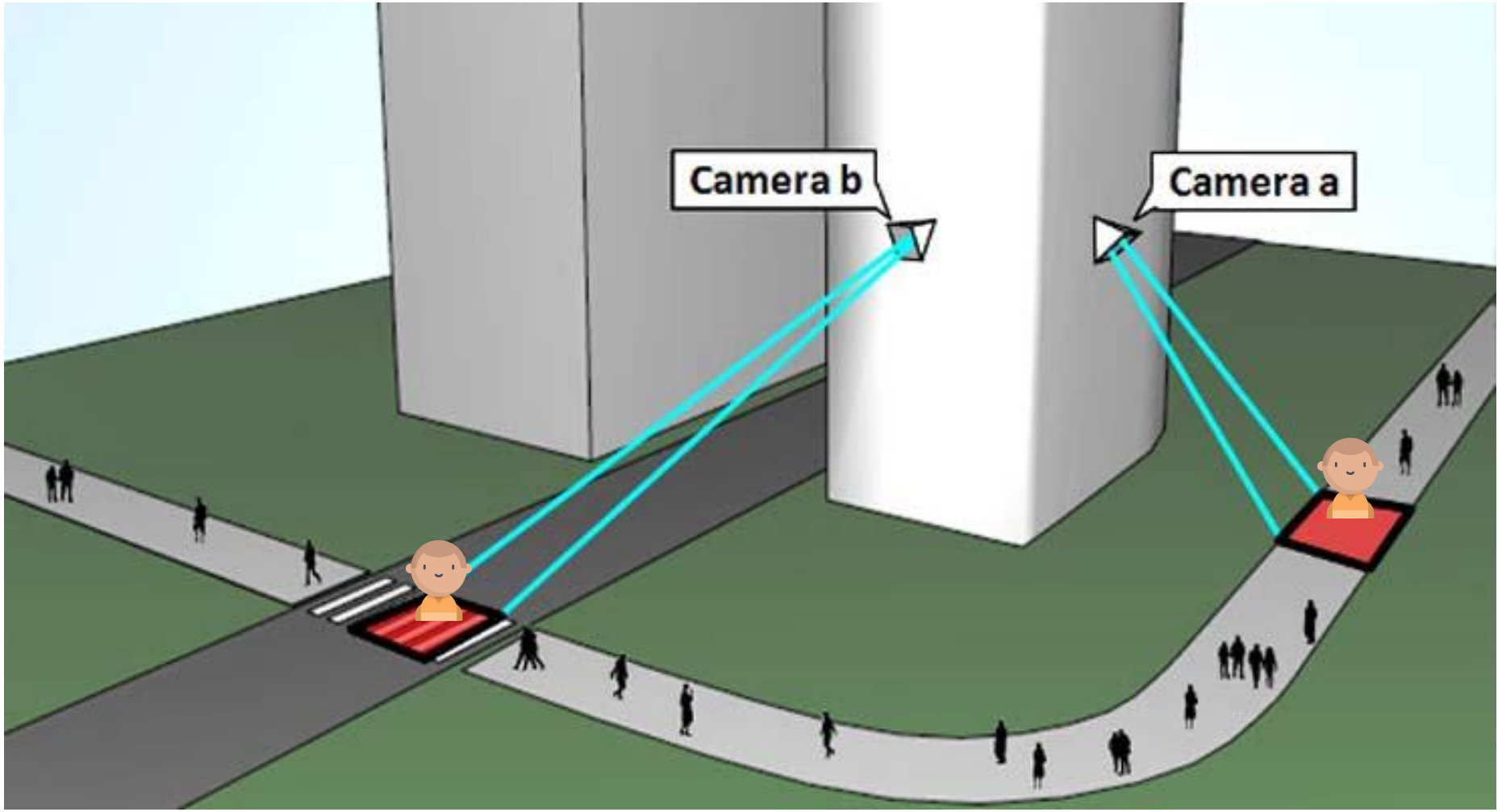
时间：2021/09/03

报告人：夏旺

Contents

Background

Background



Background

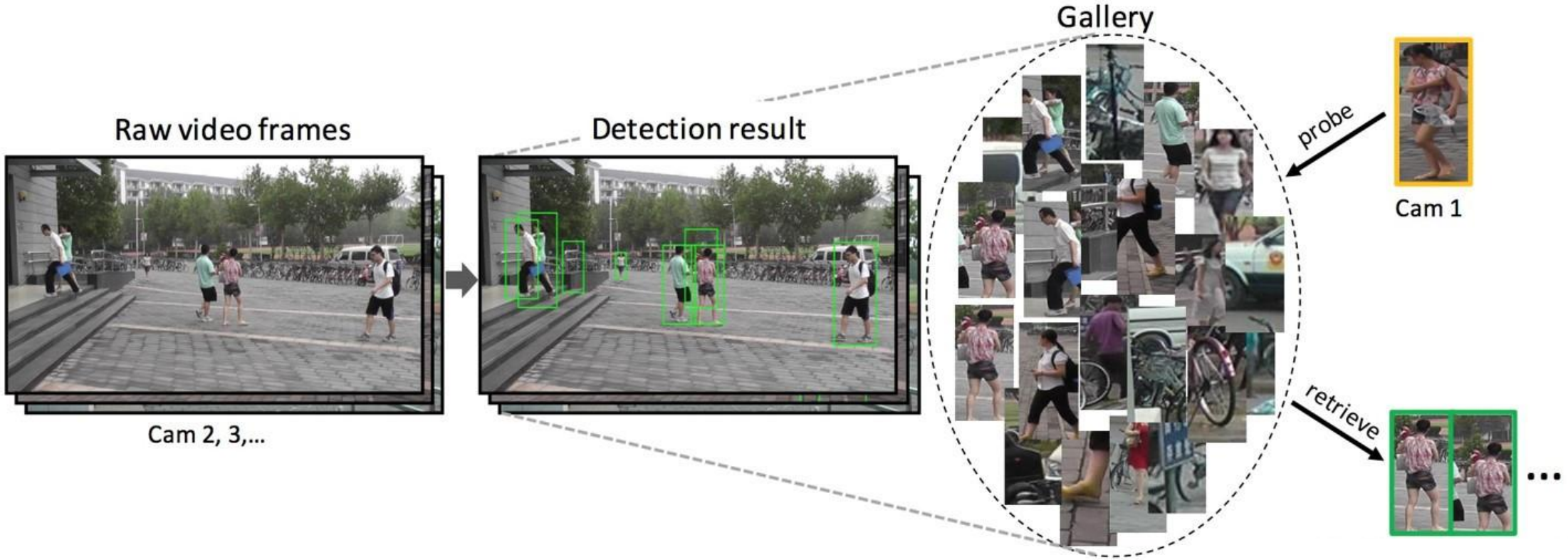
person 00

person 01

person 02

General pipeline

General pipeline



Challenges & Solution

Challenges & Resolution

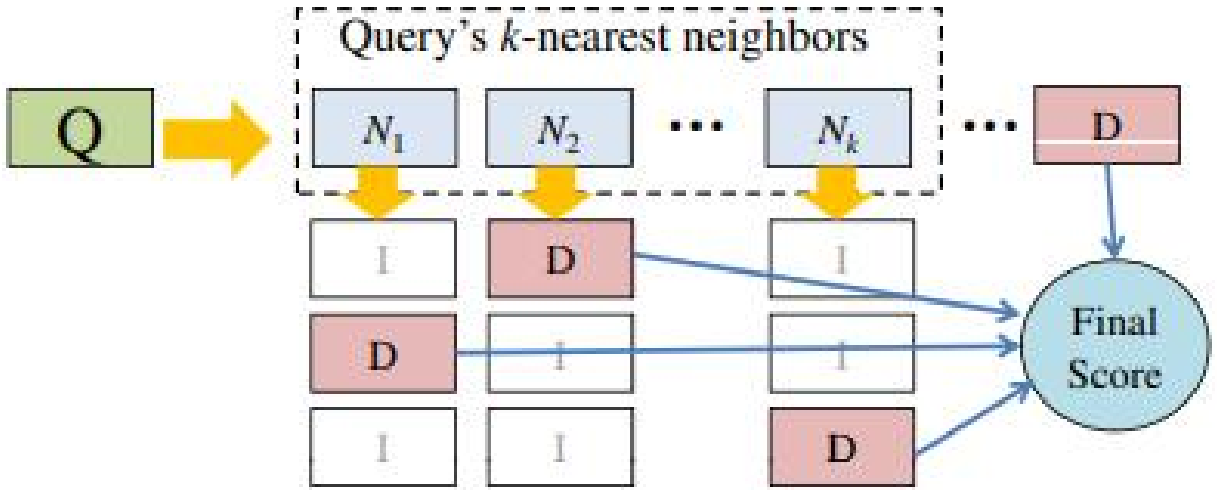
issue	solution
Occlusion	Partial Re-ID
Clothes Changing	Depth-based Re-ID
Illumination Changing	Depth-based Re-ID
low-lighting conditions	Visible-Infrared Re-ID
Cross-Resolution	Adversarial Learning Technique

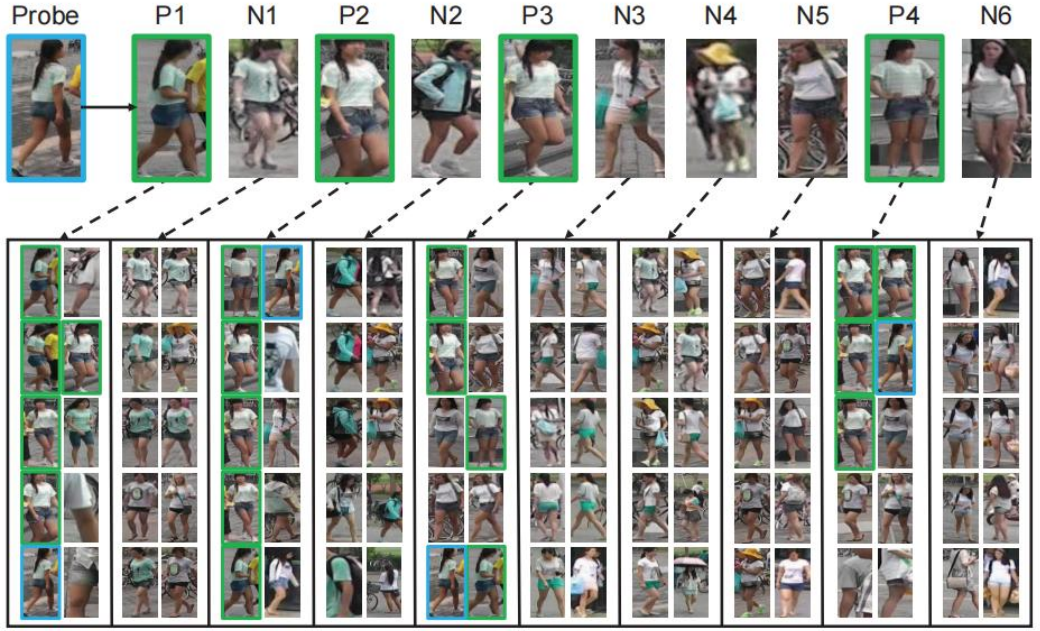
Related papers

Related papers

year	k-reciprocal	graph	cluster	human-in-loop	post-rank
2012 [8]	√				√
2013 [6]		√		√	√
2015 [5]	√				√
2015[11]					
2017 [2]	√				√
2017 [9]					√
2017[12]		√			√
2018 [3]	√				√
2019 [4]			√		

Related papers





[8] X. Shen, Z. Lin, J. Brandt, S. Avidan, and Y. Wu. Object retrieval and localization with spatially-constrained similarity measure and k-nn re-ranking. In CVPR, 2012, pp. 3013–3020.

[2] Z. Zhong, L. Zheng, D. Cao, and S. Li, "Re-ranking person re-identification with k-reciprocal encoding," in CVPR, 2017, pp. 1318–1327.

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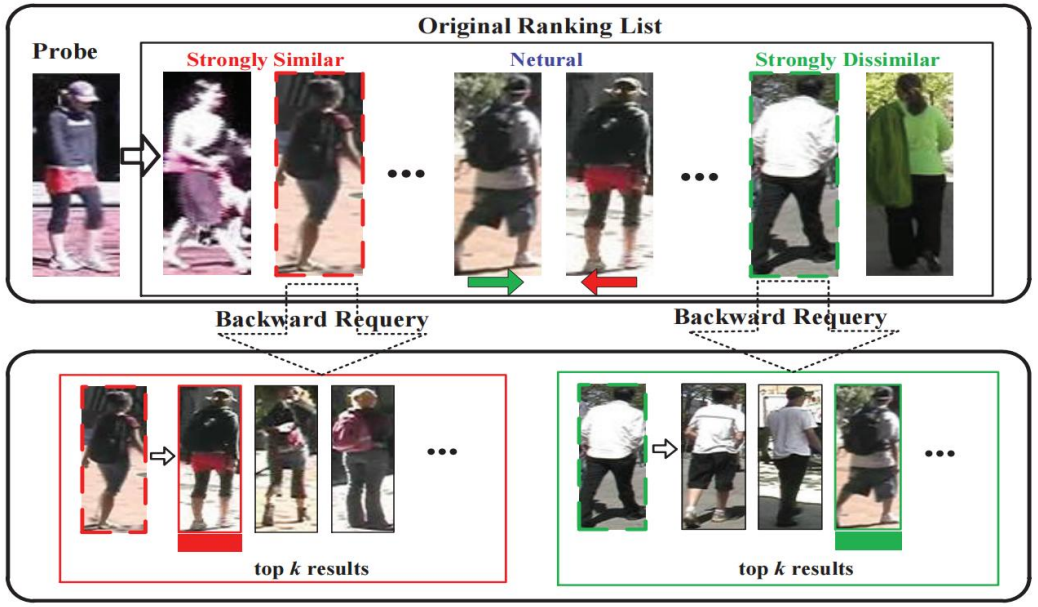
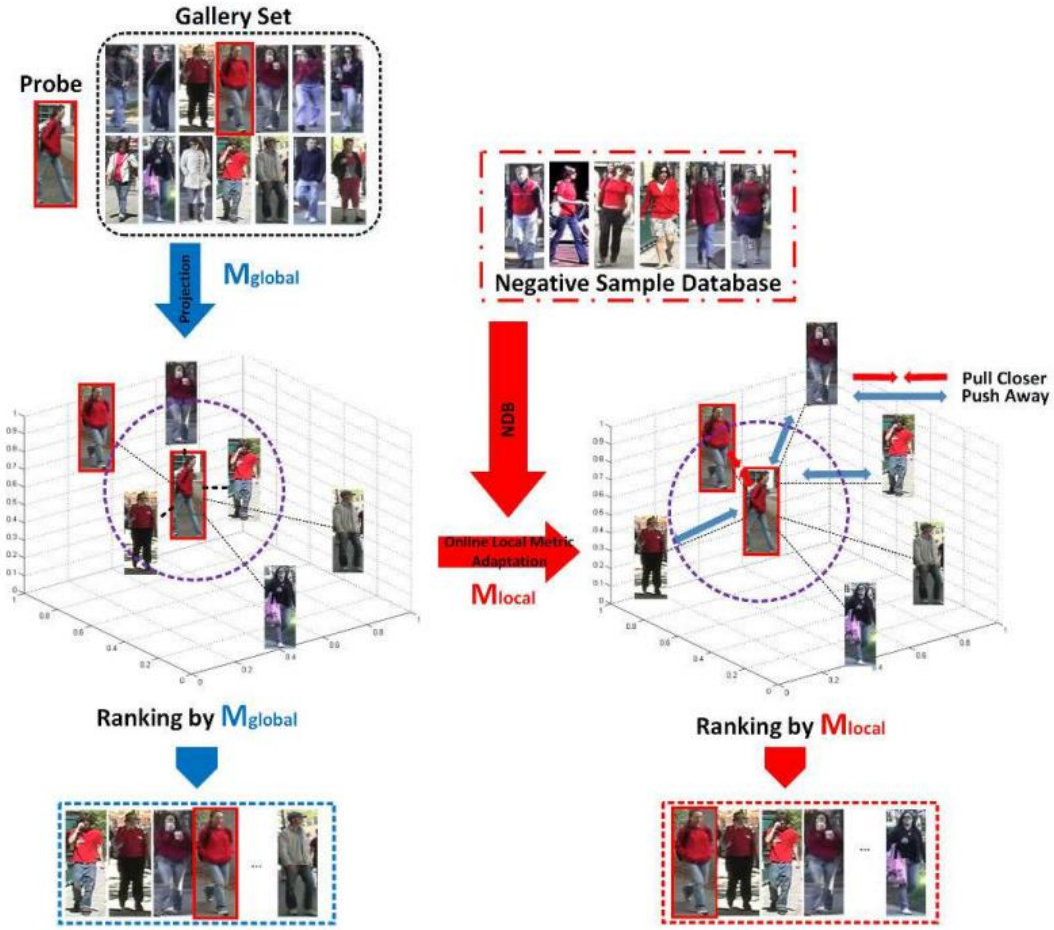


[5] M. Ye, C. Liang, Z. Wang, Q. Leng, and J. Chen, “Ranking optimization for person re-identification via similarity and dis-similarity,” in ACM Multimedia (ACM MM), 2015, pp. 1239–1242.

[3] M. S. Sarfraz, A. Schumann, A. Eberle, and R. Stiefelhagen, “A pose-sensitive embedding for person re-identification with expanded cross neighborhood re-ranking,” in CVPR, 2018, pp. 420–429.

Related papers

[6] C. Liu, C. Change Loy, S. Gong, and G. Wang, “Pop: Person re-identification post-rank optimisation,” in ICCV, 2013, pp. 441– 448.



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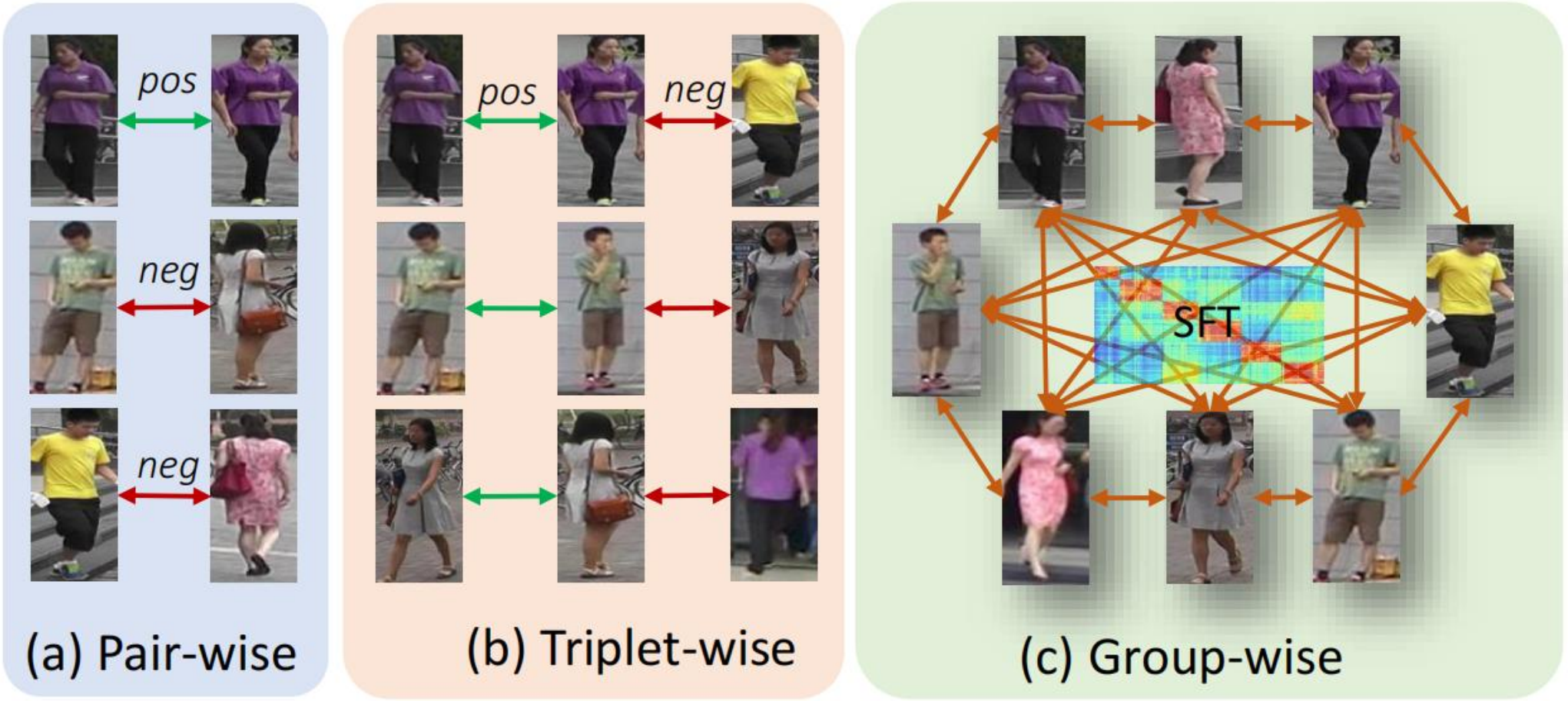

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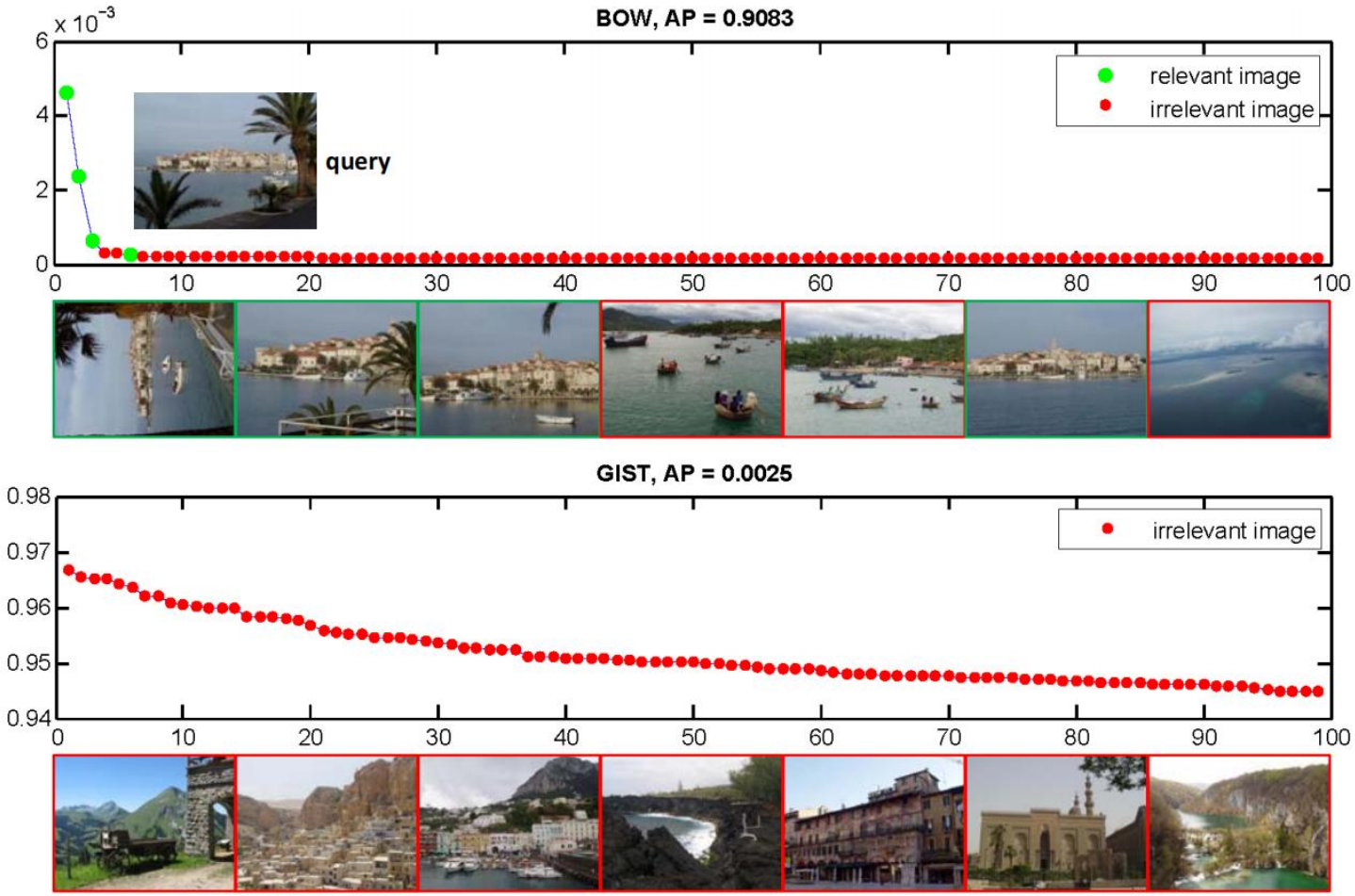


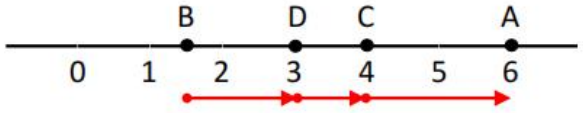
[11] L. Zheng, S. Wang, L. Tian, F. He, Z. Liu, and Q. Tian, “Query-adaptive late fusion for image search and person re- identification,” in CVPR, 2015, pp. 1741–1750.

Related papers

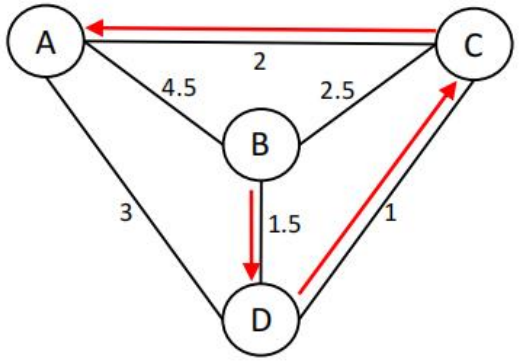
(a)

Images	A	B	C	D
Scores_A	6	1.5	4	3
Scores_B	0.8	0.3	0.7	0.5
Scores_C	70	32	47	24

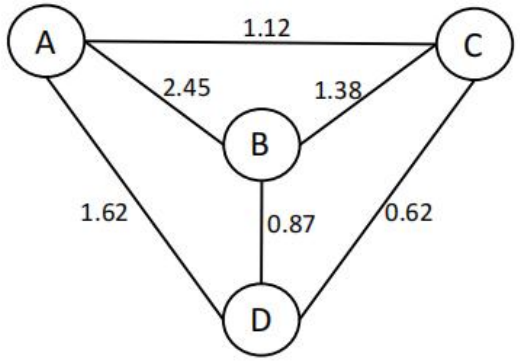
(b)



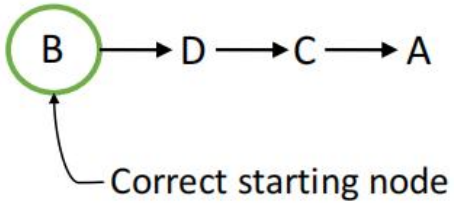
(e)



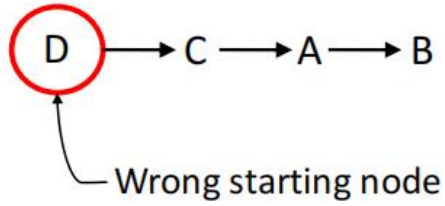
(c)



(d)



(f)



(g)

[12] A. Barman and S. K. Shah, “Shape: A novel graph theoretic algorithm for making consensus-based decisions in person re- identification systems,” in ICCV, 2017, pp. 1115–1124.

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- [2] Z. Zhong, L. Zheng, D. Cao, and S. Li, "Re-ranking person re-identification with k-reciprocal encoding," in CVPR, 2017, pp. 1318–1327.
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- [7] H. Wang, S. Gong, X. Zhu, and T. Xiang, "Human-in-the-loop person re-identification," in ECCV, 2016, pp. 405–422.
- [8]X. Shen, Z. Lin, J. Brandt, S. Avidan, and Y. Wu. Object retrieval and localization with spatially-constrained similarity measure and k-nn re-ranking. In Computer Vision and Pattern Recognition (CVPR), pages 3013–3020. IEEE, 2012.
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