

Computer Vision

Spring 2020

Problem Set #4

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1a: Base Shift0 and ShiftR2



ps4-1-a-1

1a: Base Shift0 and ShiftR5U5



ps4-1-a-2

1b: Base Shift0 and ShiftR10



ps4-1-b-1

1b: Base Shift0 and ShiftR20



ps4-1-b-2

1b: Base Shift0 and ShiftR40



ps4-1-b-3

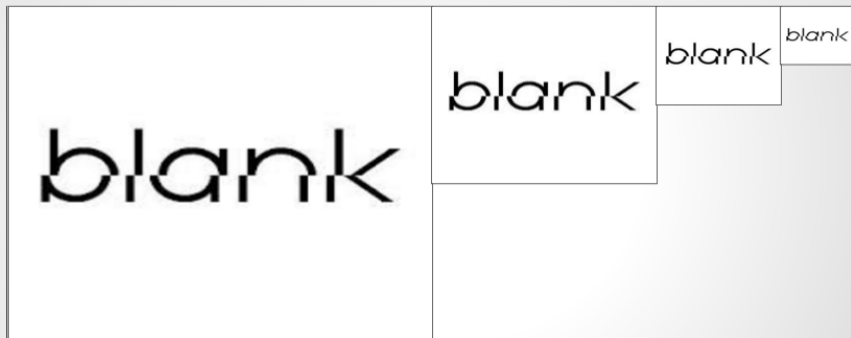
1b: Text Response

Does LK still work? Does it fall apart on any of the pairs? Try using different parameters to get results closer to the ones above.

Describe your results and what you tried.

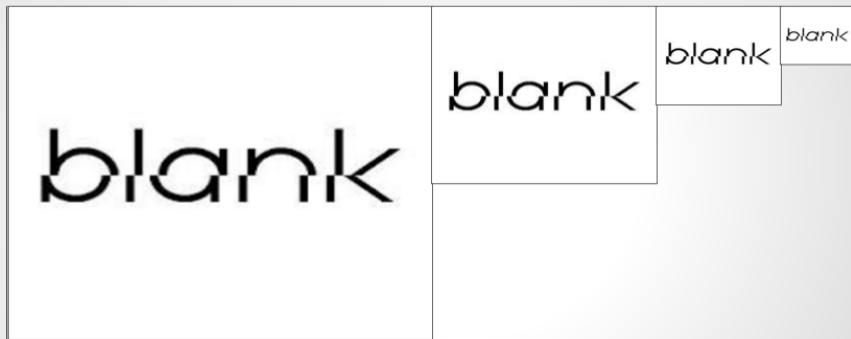
I think
my answer is ...

2a: Gaussian Pyramid



ps4-2-a-1

2b: Laplacian Pyramid



ps4-2-b-1

3a: Difference images



ps4-3-a-1

3a: Difference images (cont.)



ps4-3-a-2

4a: Hierarchical LK



ps4-4-a-1

4a: Hierarchical LK (cont.)



ps4-4-a-2

4a: Hierarchical LK (cont.)



ps4-4-a-3

4b: Hierarchical LK (cont.)



ps4-4-b-1

4b: Hierarchical LK (cont.)



ps4-4-b-2

5a: Frame Interpolation

blank	blank	blank
blank	blank	blank

ps4-5-a-1

5b: Frame Interpolation

blank	blank	blank
blank	blank	blank

ps4-5-b-1

5b: Frame Interpolation

blank	blank	blank
blank	blank	blank

ps4-5-b-2

6: Challenge Problem



ps4-6-a-1

6: Challenge Problem (cont.)



ps4-6-a-2

6: Challenge Problem (cont.)

Video link:

www.yourlink.com

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Verify that all images are still visible for grading.