Dashboard / My courses / Computer Vision / In-Class Quizzes / Lecture 08: In Class Quiz (EVEN)

Started on	Monday, 1 February 2021, 2:30 PM
State	Finished
Completed on	Monday, 1 February 2021, 2:35 PM
Time taken	4 mins 12 secs
Grade	9.55 out of 10.00 (95 %)
Question 1	
Correct	

Select the most appropriate statement regarding epipolar constraint. If you see multiple correct answers, choose the most generic statement.

Notations and Assumptions:

Mark 3.00 out of 3.00

- 1. The two images: Image1 and Image2 are of the same rigid world.
- 2. Line1 denotes a line on Image1 and Line2, that on Image2.
- 3. Point x1 lies in Image1 and x2 lies in Image2, where both are images of the same world point X.
- a. All the points in Image1 will map to a single line in Image2, where the corresponding points can be found.
- b. For every point x1 in Image 1, there exists a pair of lines: Line1 passing through x1 and Line2 in Image2 such that;
 ✓ every point on Line1 will have its corresponding point on Line2
- o c. For every line in Image1, there exists a line in Image2, where the point correspondences are constrained to.
- od. None of the other statements are true
- o e. For every point x1 in Image1, its correspondence has to lie on a specific line, Line2 in Image2

Your answer is correct.

The correct answer is:

For every point x1 in Image 1, there exists a pair of lines: Line1 passing through x1 and Line2 in Image2 such that; every point on Line1 will have its corresponding point on Line2

The physical location of two cameras are related as follows: Camera 2 is rotated by -45 degrees about Y axis (points in the world are rotated by +45 degrees) w.r.t camera1. Camera2 is then translated by 1 unit along x axis (points in the world move by -1 along x axis). The essential matrix for the camera pair is given by: e11 = 0 , e12 = 0 , e13 = 0 , e33 = 0 , e33 = 0 , e32 = 0.707	world are rotated by +45 degrees) w.r.t camera1. Camera2 is then translated by 1 unit along x axis (points in the world move by -1 along x axis). The essential matrix for the camera pair is given by: e11 = 0 , e12 = 0 , e13 = 0 , e33 = 0 , e21 = 0.707	Question 2													
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