Fuzzy Rules for the Cue Prioritization Stage

April 8, 2010

	Accommodation Rules
1.	IF scene is poor THEN accommodation is unsuitable
2.	IF scene is fair THEN accommodation is fair

	Aerial Perspective Rules
1.	IF scene is <i>poor</i> THEN aerial_perspective is <i>unsuitable</i>
2.	IF scene is fair THEN aerial_perspective is fair
3.	IF scene is suitable AND (minDistance is far OR maxDistance is far) THEN aerial_perspective is
	strong

	Binocular Disparity Rules
1.	IF scene is <i>poor</i> THEN binocular_disparity is <i>unsuitable</i>
2.	IF scene is $fair$ THEN binocular_disparity is $fair$
3.	IF scene is <i>suitable</i> AND (minDistance is NOT <i>far</i> OR maxDistance is NOT <i>far</i>) AND
4	astretic impression is <i>ibit_priority</i> THEN binocuta Lisparity is <i>strong</i>
4.	is scelic impression is medium minority THEN binorular disparity is fair
5.	Is scene is suitable AND (minDistance is NOT far OR maxDistance is NOT far) AND asthetic impression is high priority THEN binocular disparity is yeak
6.	IF scene is suitable AND (minDistance is close OR maxDistance is close) AND
	surface_target_detection is low_priority THEN binocular_disparity is weak
7.	IF scene is suitable AND (minDistance is close OR maxDistance is close) AND
	surface_target_detection is <i>medium_priority</i> THEN binocular_disparity is <i>fair</i>
8.	IF scene is suitable AND (minDistance is close OR maxDistance is close) AND
	surface_target_detection is high_priority THEN binocular_disparity is strong
9.	IF scene is <i>suitable</i> AND (minDistance is <i>close</i> OR maxDistance is <i>close</i>) AND
	patterns_of_points_in_3d is <i>low_priority</i> THEN binocular_disparity is <i>weak</i>
10.	IF scene is <i>suitable</i> AND (minDistance is <i>close</i> OR maxDistance is <i>close</i>) AND
	patterns_of_points_in_3d is <i>medium_priority</i> THEN binocular_disparity is <i>fair</i>
11.	IF scene is <i>suitable</i> AND (minDistance is <i>close</i> OR maxDistance is <i>close</i>) AND
	patterns_of_points_in_3d is high_priority THEN binocular_disparity is strong
12.	IF scene is <i>suitable</i> AND (minDistance is <i>close</i> OR maxDistance is <i>close</i>) AND
10	Judging_relative_positions is low_priority THEN binocular_disparity is weak
13.	IF scene is suitable AND (minDistance is close OR maxDistance is close) AND
14	judging_relative_positions is measure_priority THEN binocular_disparity is fair
14.	IF SCENE IS SUITABLE AND (MINDISTANCE IS CLOSE OR MAXDISTANCE IS CLOSE) AND
15	Judging relative positions is <i>ingli-priority</i> THEN binocular insparity is strong
10.	is low priorital THEN binorular disparity is used
16	IF scene is switchle AND (minDistance is close OR maxDistance is close) AND reaching for objects
10.	is medium migritu) THEN binocular disparity is fair
17.	IF scene is <i>switchle</i> AND (minDistance is <i>close</i> OR maxDistance is <i>close</i>) AND reaching for objects
1	is high priority) THEN binocular disparity is strong
18.	IF scene is suitable AND (minDistance is NOT far OR maxDistance is NOT far) AND
	tracing_data_path_in_3d_graph is <i>low_priority</i> THEN binocular_disparity is <i>weak</i>
19.	IF scene is suitable AND (minDistance is NOT far OR maxDistance is NOT far) AND
-	tracing_data_path_in_3d_graph is medium_priority THEN binocular_disparity is fair
20.	IF scene is suitable AND (minDistance is NOT far OR maxDistance is NOT far) AND

20.	If seelle is suitable first (initialistance is iter far off maximized is iter far) first
	tracing data path in 3d graph is <i>high priority</i> THEN binocular disparity is strong
	tracing_data_path_in_5d_graph is <i>high_priority</i> There billocular_disparity is <i>strong</i>

1. IF scene is <i>poor</i> THEN convergence is <i>unsuitable</i>	
2. IF scene is <i>fair</i> THEN convergence is <i>fair</i>	

	Depth-of-focus Rules
1.	IF scene is <i>poor</i> THEN dept_of_focus is <i>unsuitable</i>
2.	IF scene is fair THEN dept_of_focus is fair

	Kinetic Depth Rules
1.	IF scene is poor THEN kinetic_depth unsuitable
2.	IF scene is fair THEN kinetic_depth is fair
3.	IF scene is suitable AND tracing_data_path_in_3d_graph is low_priority THEN kinetic_depth is weak
4.	IF scene is <i>suitable</i> AND tracing_data_path_in_3d_graph is <i>medium_priority</i> THEN kinetic_depth is <i>fair</i>
5.	IF scene is <i>suitable</i> AND tracing_data_path_in_3d_graph is <i>high_priority</i> THEN kinetic_depth is <i>strong</i>
6.	IF scene is <i>suitable</i> AND patterns_of_points_in_3d is low_priority THEN kinetic_depth is <i>weak</i>
7.	IF scene is <i>suitable</i> AND patterns_of_points_in_3d is medium_priority THEN kinetic_depth is <i>fair</i>
8.	IF scene is <i>suitable</i> AND patterns_of_points_in_3d is high_priority THEN kinetic_depth is <i>strong</i>
9.	IF scene is <i>suitable</i> AND surface_target_detection is low_priority THEN kinetic_depth is <i>weak</i>
10.	IF scene is <i>suitable</i> AND surface_target_detection is medium_priority THEN kinetic_depth is <i>fair</i>
11.	IF scene is <i>suitable</i> AND surface_target_detection is high_priority THEN kinetic_depth is <i>strong</i>
12.	IF scene is <i>suitable</i> AND asthetic_impression is low_priority THEN kinetic_depth is <i>weak</i>
13.	IF scene is <i>suitable</i> AND asthetic_impression is medium_priority THEN kinetic_depth is <i>fair</i>
14.	IF scene is <i>suitable</i> AND asthetic_impression is high_priority THEN kinetic_depth is <i>strong</i>

	Linear Perspective Rules		
1.	IF scene is poor THEN linear_perspective unsuitable		
2.	IF scene is fair THEN linear_perspective is fair		
3.	IF scene is <i>suitable</i> AND tracing_data_path_in_3d_graph is <i>low_priority</i> THEN linear_perspective is <i>strong</i>		
4.	IF scene is <i>suitable</i> AND tracing_data_path_in_3d_graph is <i>medium_priority</i> THEN linear_perspective is <i>fair</i>		
5.	IF scene is <i>suitable</i> AND tracing_data_path_in_3d_graph is <i>high_priority</i> THEN linear_perspective is <i>weak</i>		
6.	IF scene is suitable AND patterns_of_points_in_3d is low_priority THEN linear_perspective is strong		
7.	IF scene is <i>suitable</i> AND patterns_of_points_in_3d is <i>medium_priority</i> THEN linear_perspective is <i>fair</i>		
8.	IF scene is suitable AND patterns_of_points_in_3d is high_priority THEN linear_perspective is weak		

Motion Parallax Rules

- 1. IF scene is *poor* THEN motion_parallax *unsuitable*
- 2. IF scene is *fair* THEN motion_parallax is *fair*
- 3. IF scene is *suitable* AND minDistance is NOT far AND judging_relative_positions is *low_priority* THEN motion_parallax is *weak*
- 4. IF scene is *suitable* AND minDistance is NOT far AND judging_relative_positions is *medium_priority* THEN motion_parallax is fair
- 5. IF scene is *suitable* AND minDistance is NOT far AND judging_relative_positions is high_priority THEN motion_parallax is strong
- 6. IF scene is *suitable* AND minDistance is NOT *far* AND reaching_for_objects is *low_priority* THEN motion_parallax is *weak*
- 7. IF scene is *suitable* AND minDistance is NOT far AND reaching_for_objects is *medium_priority* THEN motion_parallax is fair
- 8. IF scene is *suitable* AND minDistance is NOT *far* AND reaching_for_objects is *high_priority* THEN motion_parallax is *strong*
- 9. IF scene is *suitable* AND minDistance is NOT far AND asthetic_impression is *low_priority* THEN motion_parallax is *weak*
- 10. IF scene is suitable AND minDistance is NOT far AND as thetic_impression is medium_priority THEN motion_parallax is fair
- 11. IF scene is *suitable* AND minDistance is NOT *far* AND asthetic_impression is *high_priority* THEN motion_parallax is *strong*

Motion Perspective Rules

- 1. IF scene is *poor* THEN motion_perspective *unsuitable*
- $2. \qquad {\rm IF \ scene \ is \ } fair \ {\rm THEN \ motion_perspective \ is \ } fair$
- 3. IF scene is *suitable* AND aesthetic_impression is *low_priority* THEN motion_perspective is *weak*
- 4. IF scene is *suitable* AND aesthetic_impression is *medium_priority* THEN motion_perspective is *fair*
- 5. IF scene is *suitable* AND aesthetic_impression is *high_priority* THEN motion_perspective is *strong*

	Relative Brightness Rules
1.	IF scene is <i>poor</i> THEN relative_brightness is <i>unsuitable</i>
2.	IF scene is $fair$ THEN relative_brightness is $fair$

	Relative Height Rules
1.	IF scene is poor THEN relative_height is unsuitable
2.	IF scene is fair THEN relative_height is fair

	Relative Size Rules
1.	IF scene is <i>poor</i> THEN relative_size is <i>unsuitable</i>
2.	IF scene is $fair$ THEN relative_size is $fair$
3.	IF scene is <i>suitable</i> AND judging_relative_positions is <i>low_priority</i> THEN relative_size is <i>weak</i>
4.	IF scene is suitable AND (minDistance is close OR maxDistance is close OR minDistance is near
	OR maxDistance is <i>near</i>) AND judging_relative_positions is <i>medium_priority</i> THEN relative_size is
	fair
5.	IF scene is <i>suitable</i> AND (minDistance is <i>close</i> OR maxDistance is <i>close</i> OR minDistance is <i>near</i> OR
	maxDistance is <i>near</i>) AND judging_relative_positions is <i>high_priority</i> THEN relative_size is <i>strong</i>

Shadow Rules

1.	IF scene is <i>poor</i> THEN shadow is <i>unsuitable</i>
2.	IF scene is fair THEN shadow is fair
3.	IF scene is <i>suitable</i> AND asthetic_impression is <i>low_priority</i> THEN shadow is <i>strong</i>
4.	IF scene is <i>suitable</i> AND asthetic_impression is <i>medium_priority</i> THEN shadow is <i>fair</i>
5.	IF scene is <i>suitable</i> AND asthetic_impression is <i>high_priority</i> THEN shadow is <i>weak</i>
6.	IF scene is <i>suitable</i> AND patterns_of_points_in_3d is <i>low_priority</i> THEN shadow is <i>strong</i>
7.	IF scene is <i>suitable</i> AND patterns_of_points_in_3d is <i>medium_priority</i> THEN shadow is <i>fair</i>
8.	IF scene is <i>suitable</i> AND patterns_of_points_in_3d is <i>high_priority</i> THEN shadow is <i>weak</i>
9.	IF scene is <i>suitable</i> AND surface_target_detection is <i>low_priority</i> THEN shadow is <i>strong</i>
10.	IF scene is <i>suitable</i> AND surface_target_detection is <i>medium_priority</i> THEN shadow is <i>fair</i>
11.	IF scene is <i>suitable</i> AND surface_target_detection is <i>high_priority</i> THEN shadow is <i>weak</i>
12.	IF scene is <i>suitable</i> AND tracing_data_path_in_3d_graph is <i>low_priority</i> THEN shadow is <i>strong</i>
13.	IF scene is <i>suitable</i> AND tracing_data_path_in_3d_graph is <i>medium_priority</i> THEN shadow is <i>fair</i>
14.	IF scene is suitable AND tracing_data_path_in_3d_graph is high_priority THEN shadow is weak

	Shading Rules
1.	IF scene is <i>poor</i> THEN shading is <i>unsuitable</i>
2.	IF scene is fair THEN shading is fair
3.	IF scene is <i>suitable</i> AND tracing_data_path_in_3d_graph is <i>low_priority</i> THEN shading is <i>strong</i>
4.	IF scene is <i>suitable</i> AND tracing_data_path_in_3d_graph is <i>medium_priority</i> THEN shading is <i>fair</i>
5.	IF scene is <i>suitable</i> AND tracing_data_path_in_3d_graph is <i>high_priority</i> THEN shading is <i>weak</i>
6.	IF scene is <i>suitable</i> AND surface_target_detection is <i>low_priority</i> THEN shading is <i>weak</i>
7.	IF scene is <i>suitable</i> AND surface_target_detection is <i>medium_priority</i> THEN shading is <i>fair</i>
8.	IF scene is <i>suitable</i> AND surface_target_detection is <i>high_priority</i> THEN shading is <i>strong</i>

Texture Gradient Rules	
1.	IF scene is poor THEN texture_gradient is unsuitable
2.	IF scene is $fair$ THEN texture_gradient is $fair$
3.	IF scene is <i>suitable</i> AND surface_target_detection is low_priority THEN texture_gradient is <i>weak</i>
4.	IF scene is <i>suitable</i> AND surface_target_detection is medium_priority THEN texture_gradient is <i>fair</i>
5.	IF scene is <i>suitable</i> AND surface_target_detection is high_priority THEN texture_gradient is <i>strong</i>
6.	IF scene is <i>suitable</i> AND judging_relative_positions is low_priority THEN texture_gradient is <i>weak</i>
7.	IF scene is <i>suitable</i> AND judging_relative_positions is medium_priority THEN texture_gradient is
	fair
8.	IF scene is <i>suitable</i> AND judging_relative_positions is high_priority THEN texture_gradient is <i>strong</i>