

Camera Configurations and Viewing Graphs

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A set of fundamental matrices relating pairs of cameras in some configuration can be represented as edges of a "viewing graph". Whether or not these fundamental matrices are generically sufficient to recover the global camera configuration depends on the structure of this graph. We study characterizations of "solvable" viewing graphs and present several new results that can be applied to determine which pairs of views may be used to recover all camera parameters. We also discuss strategies for verifying the solvability of a graph computationally.