

Abstract: Determination of a Goal Posture of a Steerable Projector Mounted Mobile Robot in Intelligent Space for Active Information Display

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Abstract

A projection-based active information display system was proposed. The proposed system is based on Intelligent Space and a steerable projector mounted mobile robot which is called Ubiquitous Display (UD). In order to transfer visual information for a human in the Intelligent Space, the UD projects a certain shape of an image with a fixed size. Due to redundancy of degree of freedom (DOF), there are lots of situations to project a same shape and size of the image on a surface. In this paper, we describe a method to determine a goal posture of the UD. Here, the goal posture is the most efficient position and orientation of the UD so as to project visual information and it is determined by the Intelligent Space. To verify the proposed method, simulation and demonstration are carried out.

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