

Illumination Reconstruction for Augmented Reality

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In this dissertation we propose a system to increase the realism of a virtual object placed in a real environment. We aim to make the virtual object appear to be seamlessly integrated into its immediate surroundings, to achieve this we want to use information received by the camera to reflect details and changes of the background onto the object. These reflections should provide a real-time continuous way of updating the virtual objects appearance to make it truly feel like part of its environment.