



Kolloquium zur Bachelorarbeit

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„Automatic Detection of the Parameters for Image Denoising Algorithms“

Monte-Carlo rendering is one of the most used techniques to solve the rendering equation. When solved with high samples rate, it produces images with realistic global illumination effects. But it requires a large amount of computational power and time to get a clean image; the lack of convergence will visibly appear as noise in the output image. Image denoising algorithms can be used to remove unwanted noise while maintaining most of the important details. Most of the denoising algorithms depend on scene-specific parameters that must be provided by the user and must be chosen from a very wide range of values.

Finding the optimal parameter manually is impractical and time-consuming. In this work, we propose different functions to automatically estimate the required parameters. Using these functions does not only simplifies the process of filtering images, but it also increases the quality of the used filters by dynamically choosing the parameters at pixel level instead of a constant parameter that is set for the whole scene.

Montag, 30.03.2020, 13:15 Uhr,
via Videokonferenz