
Poster Presentation

[3Dp1/3DSAp1]3D and Hyper-realistic Displays and Applications 1

Thu. Nov 28, 2019 10:40 AM - 1:10 PM Main Hall (1F)

10:40 AM - 1:10 PM

[3Dp1/3DSAp1-3]Optimization Technique for Phase-Only Computer-Generated Holograms Based on Gradient Descent Method

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Keywords:Holography, Fast calculation, Algorithm

A new phase optimization technique for computer-generated holograms is proposed, which iteratively updates the phase distribution directly from the root mean square error of the reconstructed image using the chain rule. The number of iterations required for the proposed technique is much less than that required for the Gerchberg-Saxton algorithm.