

# Continuity and Interpolation Techniques for Computer Graphics

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Continuity and interpolation have been crucial topics for computer graphics since its very beginnings. Every time we want to interpolate values across some area, we need to take a set of samples over that interpolating region. However, interpolating samples faithfully to the underlying functions can be a tricky task as the functions to sample are not smooth, and can be even impossible if they are not continuous. In this paper we focus on the state of the art in continuity and interpolation in three stages of the rendering pipeline. We study these problems and their current solutions in screen space (2D), object space (3D) and screen space. With the review of the literature in these areas we hope to bring new light and foster research in these fundamental, yet not completely solved problems in Computer Graphics.

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