

Surface Reconstruction with Radial Basis Functions

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In this presentation, I will talk about my work here, that is, surface reconstruction from scattered points with Radial Basis Functions. I will especially discuss two topics, error-constrained multi-level surface reconstruction with RBFs which combines local Orthogonal Least Squares criterion and a global iterative process, and RBFs suitable for implicit surface modeling which use a two-level interpolation approach. Some results and limitations of RBFs will also be shown in the slides.