3D Linear Facial Animation Based on Real Data

- Face models obtained by a 3D scanner
- Correspondences among meshes
- Linear interpolation
3D Linear Facial Animation Based on Real Data

- Displacement matrices
- Expression transfer
3D Motion Tracking
Based on Probabilistic Volumetric Reconstruction and Optical Flow

Federal University of Rio Grande - FURG

3D Probabilistic Reconstruction
+ Optical Flow
+ Simple Representation Model

Markerless 3D Motion Tracking of objects without a pre-defined shape
3D Motion Tracking Based on Probabilistic Volumetric Reconstruction and Optical Flow

Federal University of Rio Grande – FURG
Comparison of Finite Element Bases for Global Illumination in Image Synthesis

• Approximation of the rendering equation using FEM.
• Comparison between three different types of bases.
• Validation of the method using a "exact" solution.