Learning to Generate 3D Stylized Character Expressions from Humans

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Background
Accurate facial expression creation is critical and tough! Geometry mapping is not enough!

Objective
Automatically generate 3D stylized character expressions from humans in a perceptually valid manner.

System Overview

Comparison with Faceware

Results

Applications
- Enhance performance-based animation: animated films, VR/AR and robotics.
- Creative authoring tool: provide feedback to animators for expression clarity, create good starting points for further refinement.
- Medical: Cyber human system for teaching children with autism spectrum disorder (ASD) to both recognize and convey expressions.