

# Optical Illusion Puppet Generator

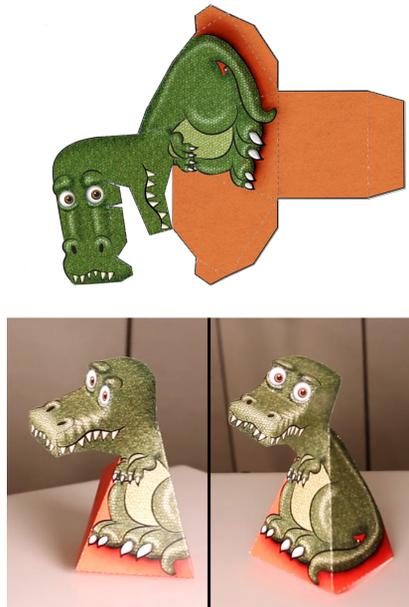
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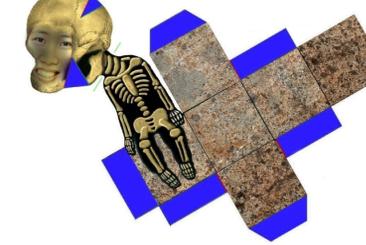
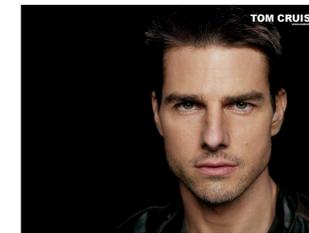
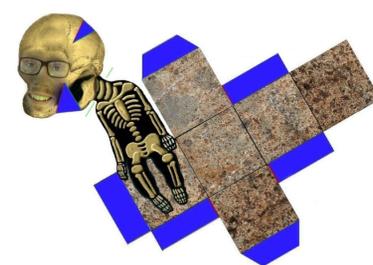
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## Motivation

Art is inherently visual. With the advances of computational imaging, one is able to explore the possibilities of allowing the public to interact with art in ways that would be otherwise impossible. For example, an engineered t-rex paper craft can produce an optical illusion which make the observers feel that the t-rex is always looking at them. To fulfill this goal, this project aims to designing a system that can crop human face from photo and map it on a template that can create an optical illusion effect which lets the image seem to turn its head and follow you as you move.



## Experimental Results



Look from left-hand side



Look from right-hand side

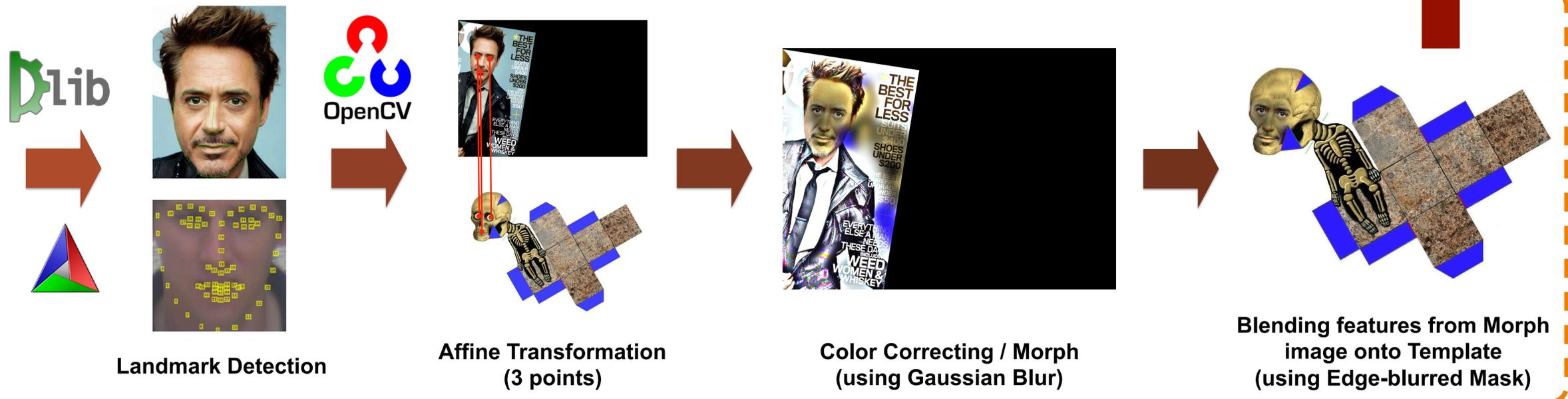
## Pipeline

### Settings and Input



Template (with labeled coordinates of eyes and mouth) + Mask + Photo

### Auto Generator



Landmark Detection

Affine Transformation (3 points)

Color Correcting / Morph (using Gaussian Blur)

Blending features from Morph image onto Template (using Edge-blurred Mask)