

# Project: Texture Synthesis and Transfer

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## Paper: Image Quilting for Texture Synthesis and Transfer

<http://graphics.cs.cmu.edu/people/efros/research/quilting/quilting.pdf>

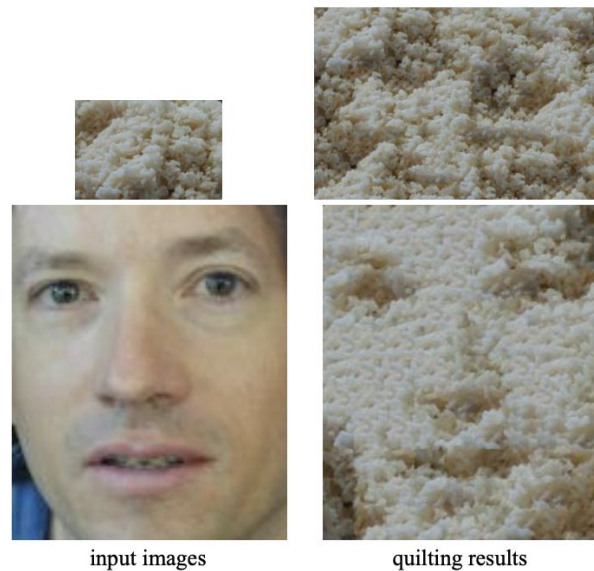


Figure 1: Demonstration of quilting for texture synthesis and texture transfer. Using the rice texture image (upper left), we can synthesize more such texture (upper right). We can also transfer the rice texture onto another image (lower left) for a strikingly different result.

We have planned to implement the above paper for texture synthesis and generation. The algorithm described in the paper performs the synthesis of a large image with the same texture as the given sample (small) image denoting the reference texture using the “Quilting” algorithm.

Further, the paper also proposes an algorithm to modify the quilting algorithm in such a way that the generated image texture matches with the given reference texture image while the content is made to match with the reference content image.

**Evaluation dataset:** We use the dataset made available for this task by Prof. Alexei A. Efros. The dataset containing test images can be found [here](#)

**Validation strategy:** We will be using manual inspection and subjective evaluation for the implemented algorithm. [as done in the paper]