TexSynth

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About the tool

The goal of this tool is to create a new texture that looks "similar" to a given input texture, and tiles. This is easier said than done, so in practice this tool is *trying* to make the result look similar, and *tries* to make the resulting image tile. This means that this tool may or may not be useful; it depends on the input image, and some luck with the statistics. Ideally, input images should be true *textures* : uniform throughout, without macro structures. In practice, some structure is allowed; but still, don't expect this tool to work properly with a pic of your dog.

Here are some examples of an input image and the resulting output :

- Bark
- Sand
- Clanbase Logo

Bark
Pretty good tiling.
The main reason seems to be the removal of the highlight
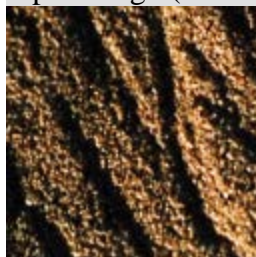
Input image (128x128)

Output image (200x200)

Sand
Tiles less vertically, horizontally still ok
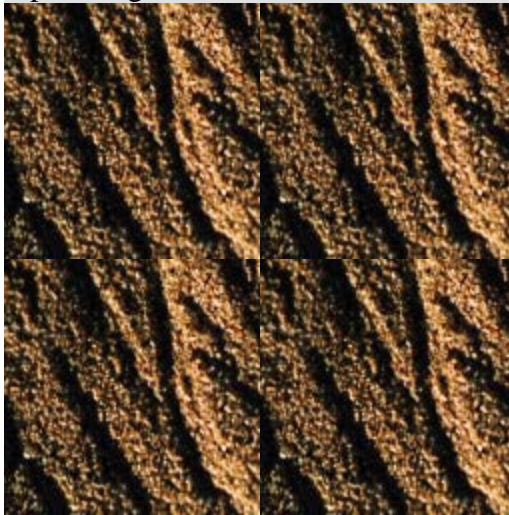Very small discontinuities visible *inside* the synthesized image

Input image (128x128)

Output image (200x200)
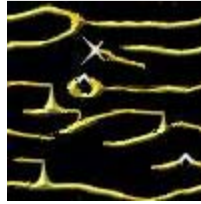
Input image, tiled 2x2

Output image, tiled 2x2

Clanbase logo
Experimenting with non-textures : tiles, but no features cross the vertical boundary..
Demonstrates non-power-of-two input abilities
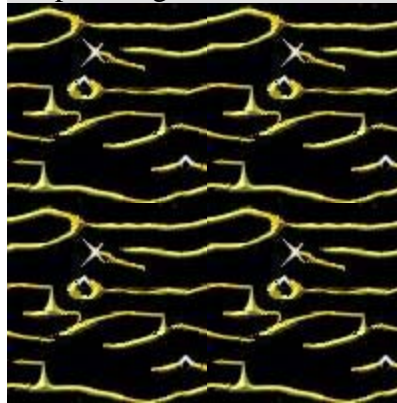
Input image (125x67)

Output image (100x100)

Input image, tiled 2x2

Output image, tiled 2x2

If you care, the code is a hybrid implementation of the texture synthesis papers in SigGraph 2001 and 1995, hybrid meaning "hacked up for style".

Releases

The current version of the tool is 0.3. It supports :

- Loading tga and jpg images
- Synthesizing with various filter sizes to balance speed and feature accuracy
- Using subsampling to boost sample analysis
- Aborting the synthesis at any time and save what you have at that point
- Watching a realtime preview of the result
- Using various distance metrics for different artistic effects

This program is **freeware** : you can distribute and copy it at will as long as you do so at no

charge, except for charges to cover the carrying media. The software may be repacked as part of a package as long as the original ZIP file is included **unmodified**.

If you happen to use this tool for production work, credit would be cool ;)

Version 0.3, 25/09/2001

texsynth.zip 62531 bytes

If it complains about "msvcp60.dll not found", put this file (115795 bytes) in your c:\windows\system.

Sites :

- http://users.chello.be/sf15772/texsynth/ Homepage of TexSynth
- http://users.chello.be/sf15772/ My homepage

Email : rat@planetquake.com Using this email alias instead of rat@larian.com should provide faster response.

Credits

- Beta testing : Chris Toth; Eric Von Rothkirch (Redchurch)
- Programming : Bert Peers
- Sample textures are from the MIT Media lab VisTex texture set, Clanbase
- This program uses : the Independent JPEG group's library

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