

Finding Texture Tiles

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Motivation

We have done with textures:

- Filled in holes
- Expanded Pattern
- (Image quilting, Markov chain)

We haven't:

- Been able to expand perpetually

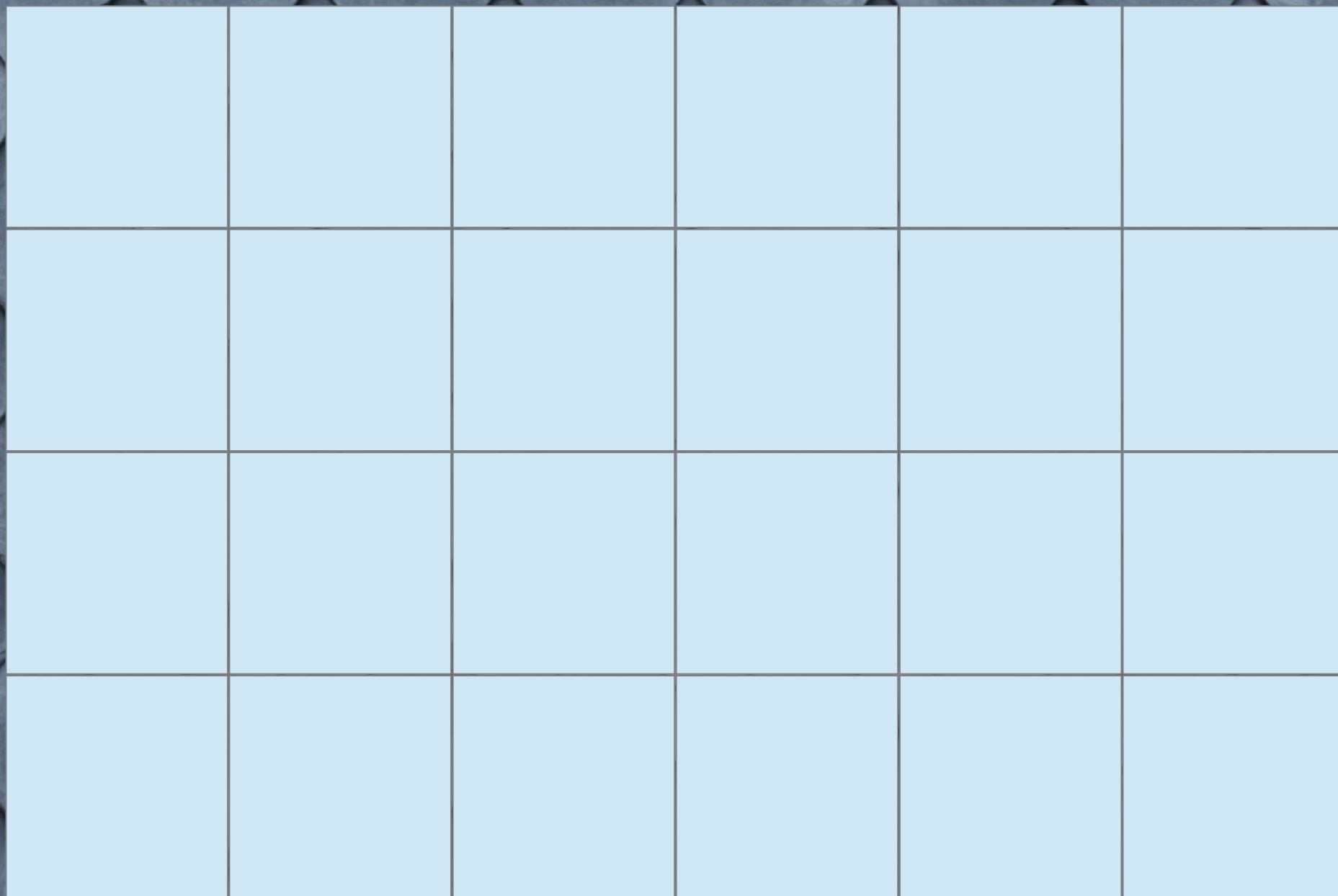
Our Goal

Given: input image containing pattern

Output: “Tile” that produces pattern

CSS:

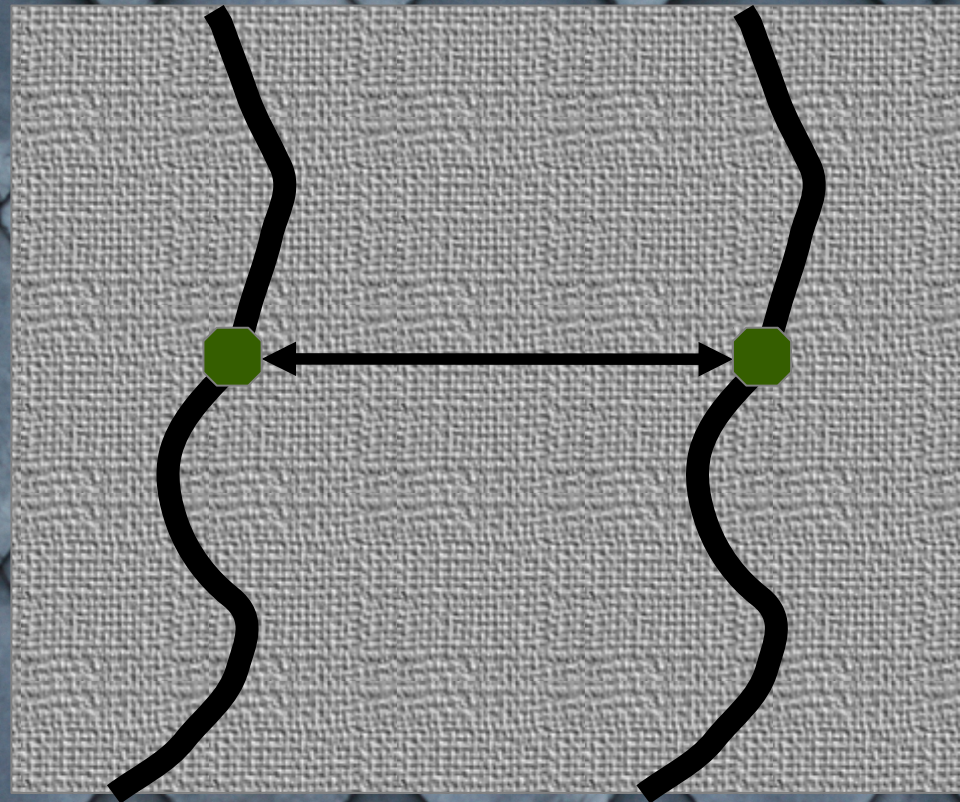
```
body {  
    background-image:url('bg.gif');  
    background-repeat:repeat;  
}
```



The image features a central 4x6 grid of light blue squares, each separated by thin dark grey lines. This grid is set against a background of dark grey, diamond-shaped stone tiles with visible mortar lines. The grid is empty, with no text or other markings inside the cells.

Our Technique

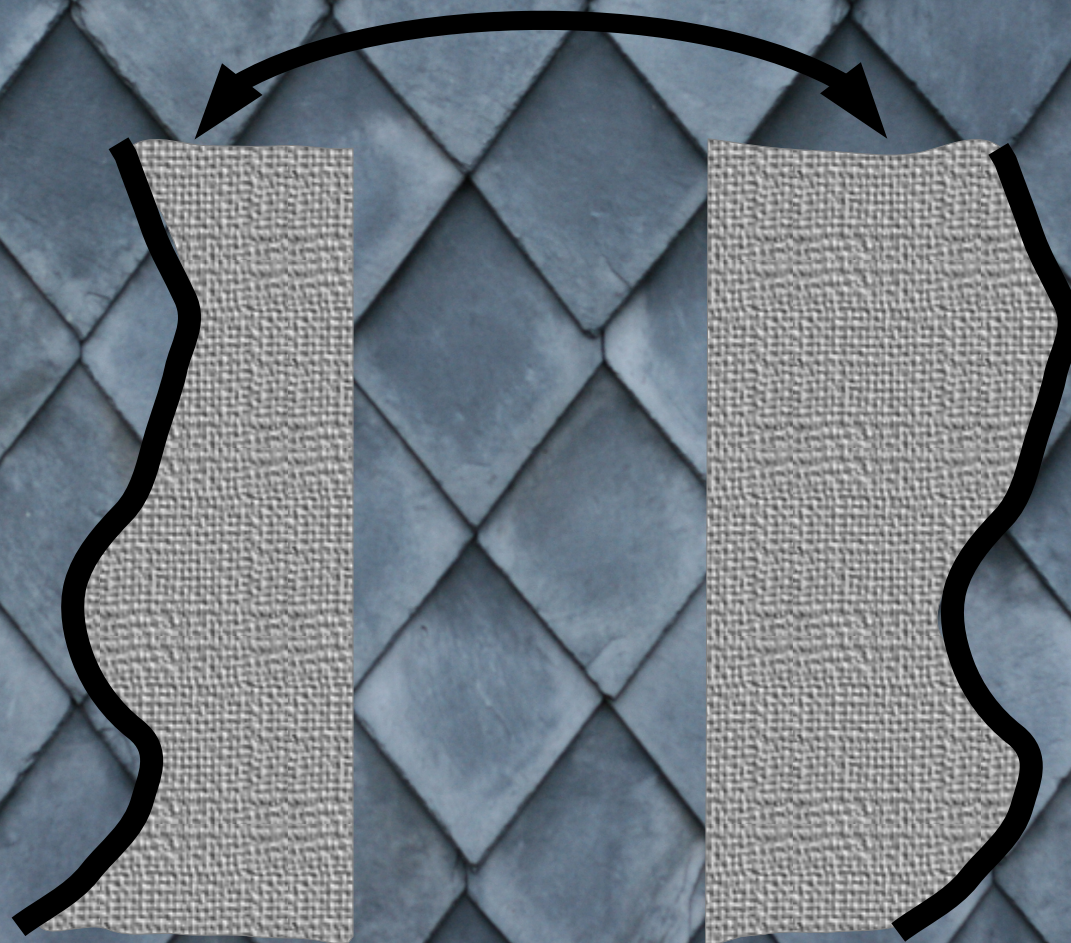
Input:



Our Technique

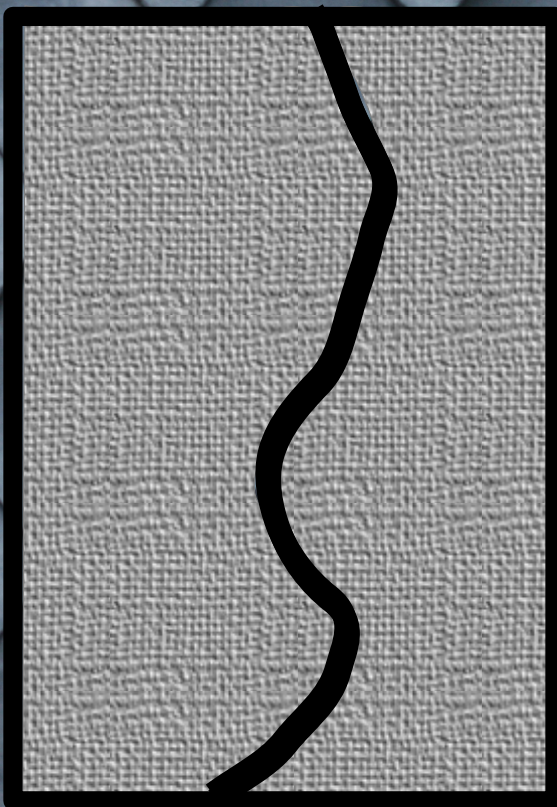


Our Technique



Our Technique

Output:



Results:

Website:

Pages.cs.wisc.edu/~preasa/534