

Texture Mapping

Po-Cheng Pan

Texture Patch

- <http://www.mathworks.com/matlabcentral/fileexchange/28106-texture-patch>
- By [Dirk-Jan Kroon](#)
- Show a 3D triangulated mesh (patch) with a texture

- `patcht(FF,VV,TF,VT,I,Options);`

inputs,

FF : Face list 3 x N with vertex indices

VV : Vertices 3 x M

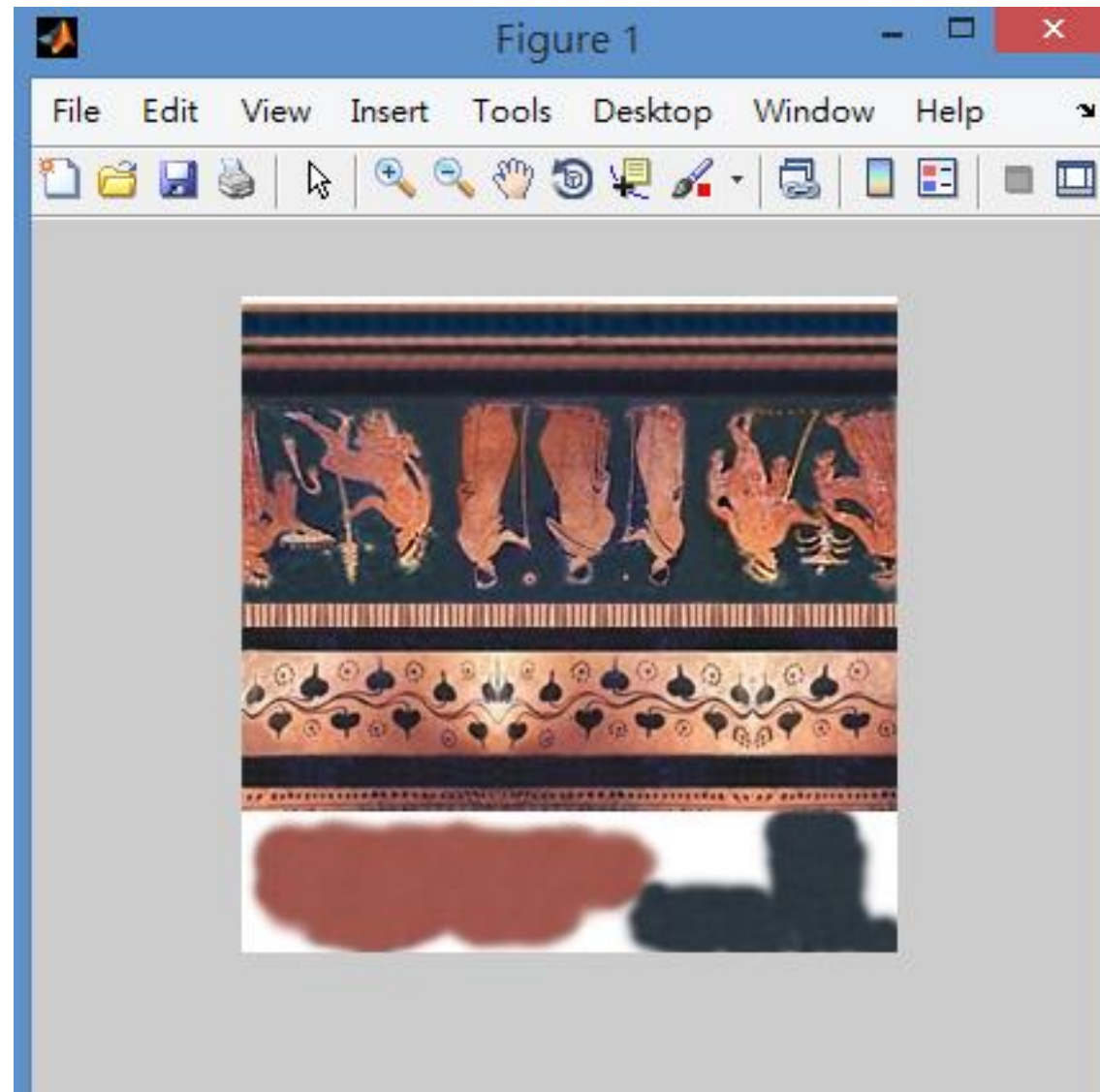
TF : Texture list 3 x N with texture vertex indices

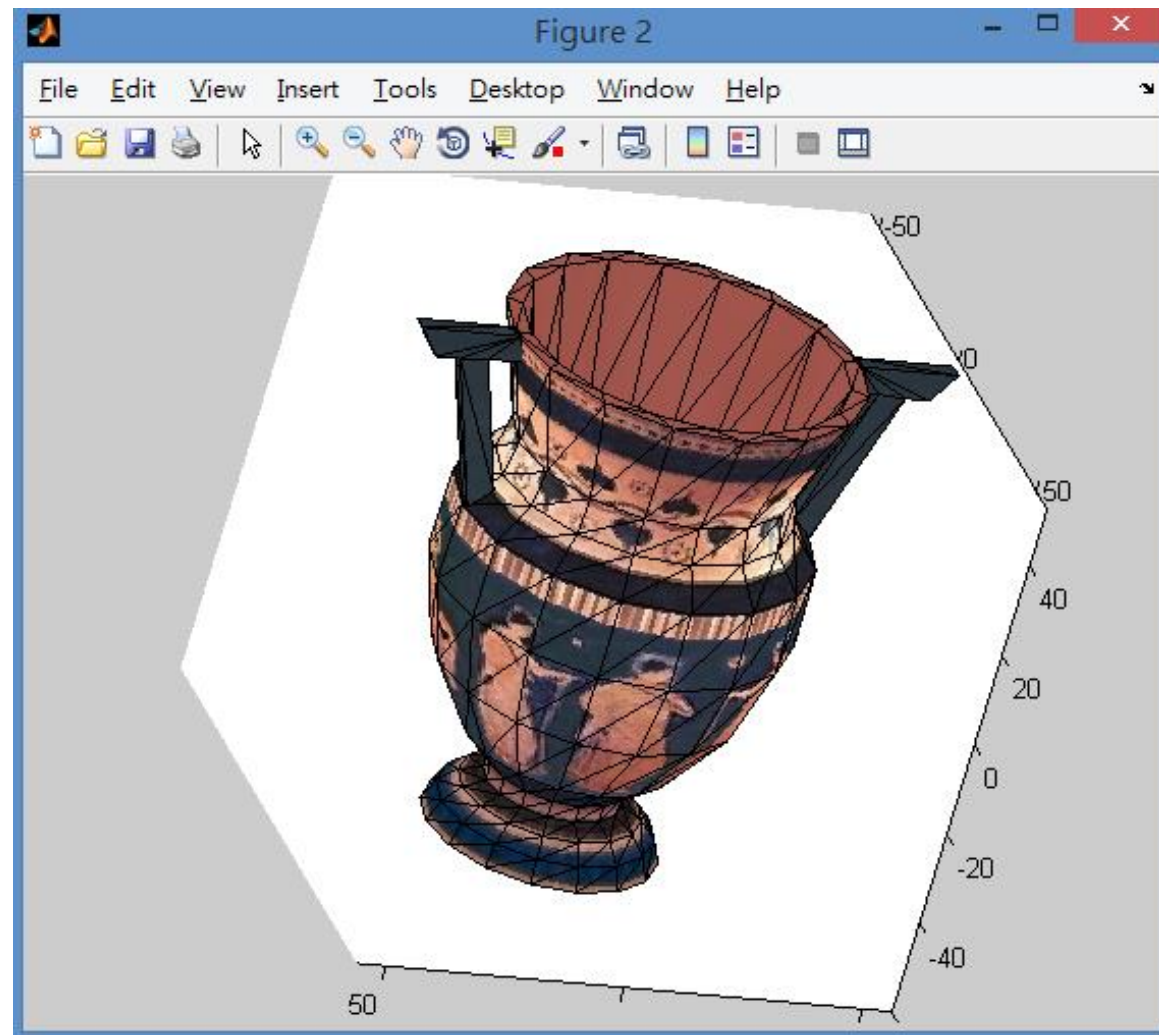
VT : Texture Coordinates s 2 x K, range must be [0..1] or real pixel positions

I : The texture-image RGB [O x P x 3] or Grayscale [O x P]

Options : Structure with options for the textured patch such as
EdgeColor, EdgeAlpha see help "Surface Properties ::

Functions"





Implement

```
im = imread('woody.png');  
[V,F] = load_mesh('woody.obj');  
patcht(F,V,F,[max(V(:,2))-V(:,2) V(:,1)],im);  
axis equal
```



Expected Function

- `resultImage = textureMapping(image ,S ,T)`
- `image` 就是一張圖，`S`和`T`各是`n x 6`維的陣列，`S`和`T`的每一項是三角形三個點的座標(`x1,y1,x2,y2,x3,y3`)