

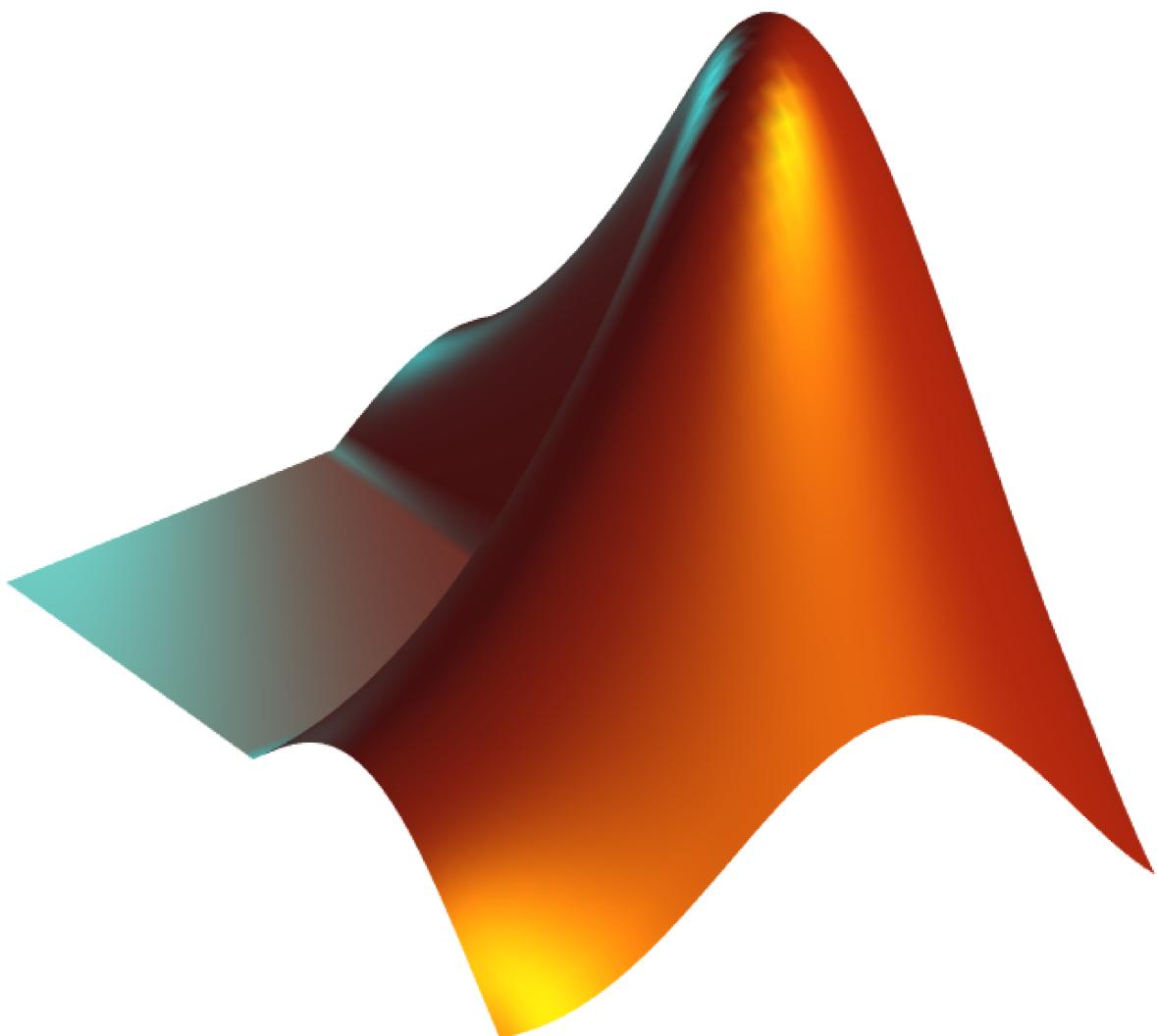
perspective homography matlab

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This is a matlab program to project an image in perspective view of a background image.
Only 10 lines of code will do!

```
% perspective-homography-matlab 即广告牌贴图  
bigImg = imread("images/bigImg.png");  
figure;imshow(bigImg);  
  
logoImg = imread("images/logo.png");  
figure;imshow(logoImg);
```



```
figure(1)
```

```
roi = drawpolygon();% Order of point taking: topleft,topright,bottomright,bottomleft
```



```
fixedPts = roi.Position;
movIngPts = [[1,1];
    size(logoImg,2),1;
    size(logoImg,2),size(logoImg,1);
    1,size(logoImg,1)];
tform = fitgeotform2d(movIngPts,fixedPts,"projective");% homography transformation

% warp image,specify output view range
ref = imref2d(size(bigImg,[1,2]),[1,size(bigImg,2)],[1,size(bigImg,1)]);
alignedImg = imwarp(logoImg,tform,OutputView=ref);

% 贴图
blender = vision.AlphaBlender("Operation","Binary Mask","MaskSource","Input port");
outImg = blender(im2single(bigImg),im2single(alignedImg),sum(alignedImg,3)~=0);
figure;imshow(outImg)
```

