

【图像隐写】基于matlab WOW算法图像自适应隐写【含Matlab源码 368期】

原创

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一、获取代码方式

获取代码方式1:

通过订阅紫极神光博客付费专栏, 凭支付凭证, 私信博主, 可获得此代码。

获取代码方式2:

完整代码已上传我的资源: [【图像隐写】基于matlab WOW算法图像自适应隐写【含Matlab源码 368期】](#)

备注:

订阅紫极神光博客付费专栏，可免费获得1份代码（有效期为订阅日起，三天内有效）；

二、部分源代码

```
% EXAMPLE - USING "WOW" embedding distortion
%
% -----
%
% -----
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% -----
%
% -----
clc; clear all;

% load cover image
cover = imread(fullfile('.', 'images_cover', '1.pgm'));

% set payload
payload = 0.4;

% set params
params.p = -1; % holder norm parameter

fprintf('Embedding using matlab code');
MEXstart = tic;

function [stego, distortion] = WOW(cover, payload, params)
% -----
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% -----
```

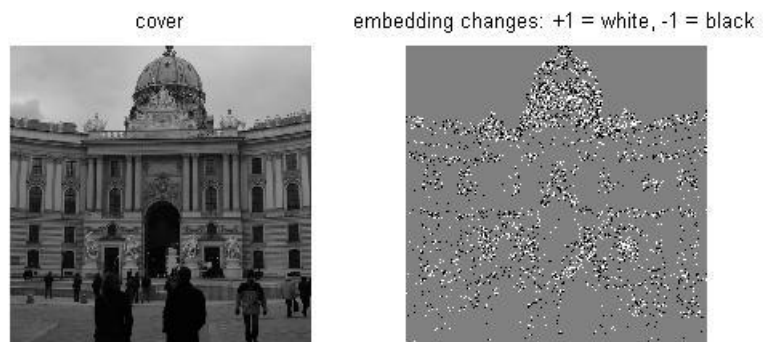
```

% Contact: vojtech_holub@yahoo.com | fridrich@binghamton.edu | October 2012
% http://dde.binghamton.edu/download/steganography
% -----
% This function simulates embedding using WOW steganographic
% algorithm. For more deatils about the individual submodels, please see
% the publication [1].
% -----
% Input: coverPath ... path to the image
% payload ..... payload in bits per pixel
% Output: stego ..... resulting image with embedded payload
% -----
% [1] Designing Steganographic Distortion Using Directional Filters,
% V. Holub and J. Fridrich, to be presented at WIFS'12 IEEE International
% Workshop on Information Forensics and Security
% -----

%% Get 2D wavelet filters - Daubechies 8
% 1D high pass decomposition filter
hpdf = [-0.0544158422, 0.3128715909, -0.6756307363, 0.5853546837, 0.0158291053, -0.2840155430, -0.0004724846, 0.1287474266, 0.0173693010, -0.0440882539, ...
        -0.0139810279, 0.0087460940, 0.0048703530, -0.0003917404, -0.0006754494, -0.0001174768];
% 1D low pass decomposition filter
lpdf = (-1).^(0:numel(hpdf)-1).*fliplr(hpdf);
% construction of 2D wavelet filters
F{1} = lpdf'*hpdf;
F{2} = hpdf'*lpdf;
F{3} = hpdf'*hpdf;

```

三、运行结果



<https://blog.csdn.net/TIQCmatlab>

四、matlab版本及参考文献

1 matlab版本

2014a

2 参考文献

- [1] 蔡利梅.MATLAB图像处理——理论、算法与实例分析[M].清华大学出版社, 2020.
- [2] 杨丹,赵海滨,龙哲.MATLAB图像处理实例详解[M].清华大学出版社, 2013.
- [3] 周品.MATLAB图像处理与图形用户界面设计[M].清华大学出版社, 2013.
- [4] 刘成龙.精通MATLAB图像处理[M].清华大学出版社, 2015.