

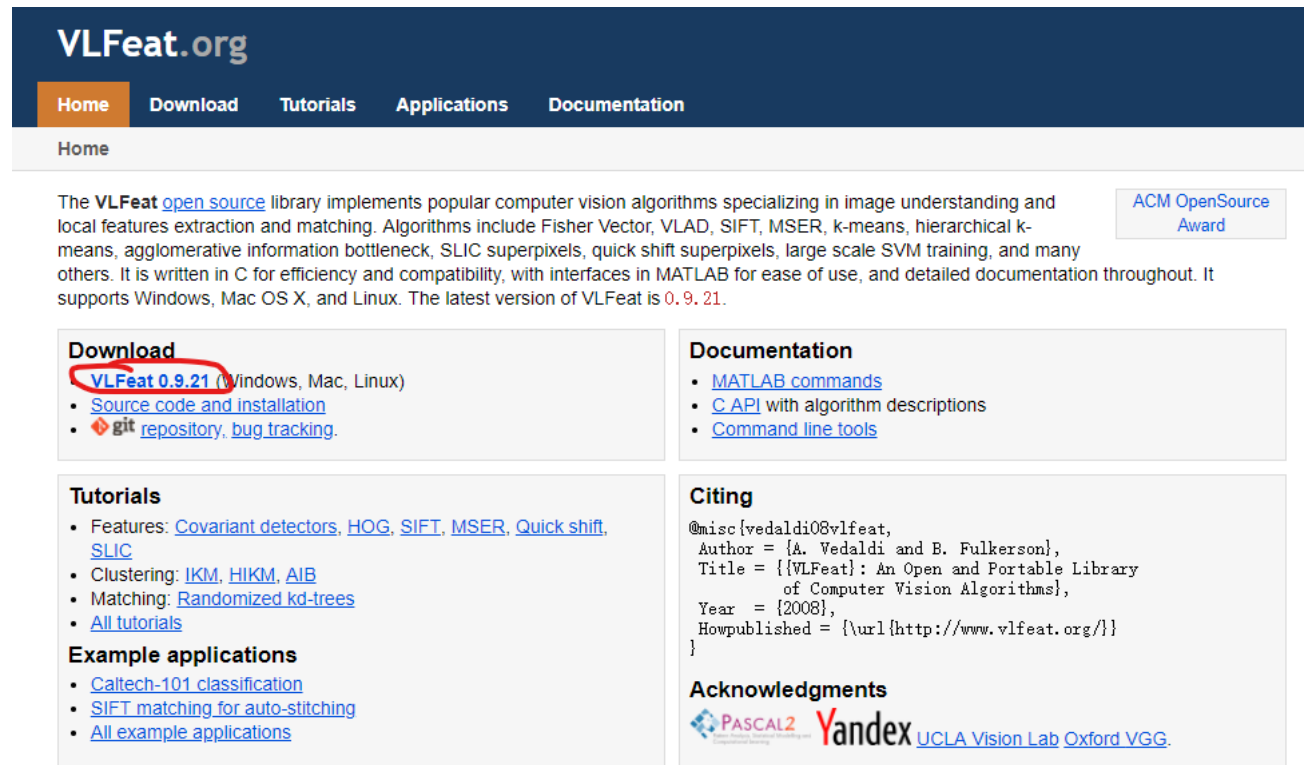
在MATLAB R2018b中配置VLFeat

作者：凯鲁嘎吉 - 博客园 <http://www.cnblogs.com/kailugaji/>

VLFeat官网: <http://www.vlfeat.org>

VLFeat 开源库专注于实现当前最为流行的图像理解和局部特征提取和匹配的计算机视觉算法。算法包括Fisher向量, VLAD, SIFT, MSER, k均值, 分层k均值, 聚集信息瓶颈, SLIC超像素, 快速移位超像素, 大规模SVM训练等。它是用C编写的, 以提高效率和兼容性, 并带有MATLAB的接口, 以易于使用, 并在全文中提供详细的文档。它支持Windows, Mac OS X和Linux。最新版本的VLFeat是0.9.21。下面讲解一下VLFeat库在MATLAB中的配置。

1. 下载最新版本的VLFeat 0.9.21



The screenshot shows the VLFeat.org website. The navigation bar includes links for Home, Download, Tutorials, Applications, and Documentation. The main content area features a paragraph about the library, an ACM OpenSource Award badge, and four sections: Download, Documentation, Tutorials, and Citing. The Download section is highlighted with a red circle around the 'VLFeat 0.9.21' link, which is noted as being for Windows, Mac, and Linux. Other links in this section include 'Source code and installation' and 'git repository, bug tracking'. The Tutorials section lists features like Covariant detectors, HOG, SIFT, MSER, Quick shift, SLIC, and clustering methods like IKM, HIKM, AIB. The Citing section provides a BibTeX entry for the library. The Acknowledgments section lists logos for PASCAL2, Yandex, UCLA Vision Lab, and Oxford VGG.

VLFeat.org

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Home

The **VLFeat** [open source](#) library implements popular computer vision algorithms specializing in image understanding and local features extraction and matching. Algorithms include Fisher Vector, VLAD, SIFT, MSER, k-means, hierarchical k-means, agglomerative information bottleneck, SLIC superpixels, quick shift superpixels, large scale SVM training, and many others. It is written in C for efficiency and compatibility, with interfaces in MATLAB for ease of use, and detailed documentation throughout. It supports Windows, Mac OS X, and Linux. The latest version of VLFeat is **0.9.21**.

ACM OpenSource Award

Download

- VLFeat 0.9.21** (Windows, Mac, Linux)
- [Source code and installation](#)
- [git repository, bug tracking](#)

Documentation

- [MATLAB commands](#)
- [C API](#) with algorithm descriptions
- [Command line tools](#)

Tutorials

- Features: [Covariant detectors](#), [HOG](#), [SIFT](#), [MSER](#), [Quick shift](#), [SLIC](#)
- Clustering: [IKM](#), [HIKM](#), [AIB](#)
- Matching: [Randomized kd-trees](#)
- [All tutorials](#)



Example applications

- [Caltech-101 classification](#)
- [SIFT matching for auto-stitching](#)
- [All example applications](#)

Citing

```
@misc{vedaldi08vlfeat,
  Author = {A. Vedaldi and B. Fulkerson},
  Title = {{VLFeat}: An Open and Portable Library
    of Computer Vision Algorithms},
  Year = {2008},
  Howpublished = {\url{http://www.vlfeat.org/}}
}
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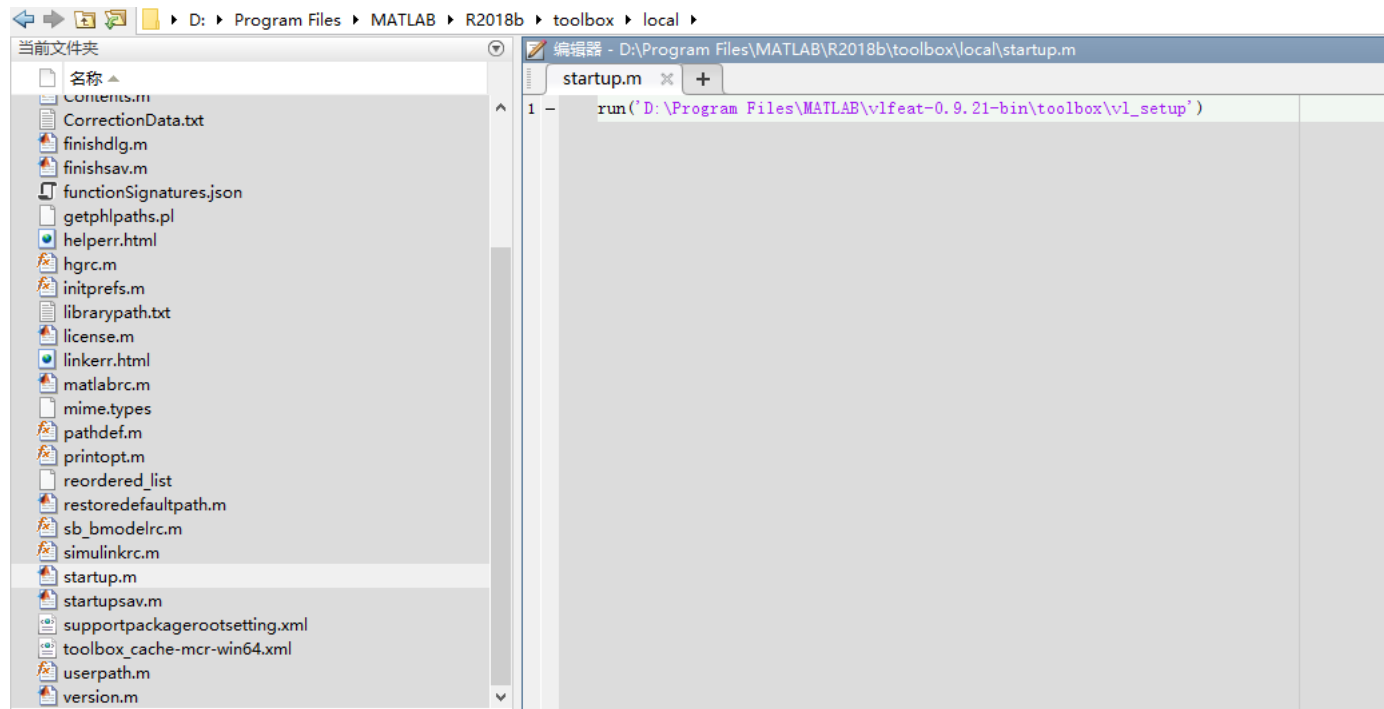
Acknowledgments

  [UCLA Vision Lab](#) [Oxford VGG](#)

2. 解压到某一路径, 比如: D:\Program Files\MATLAB\vlfeat-0.9.21-bin

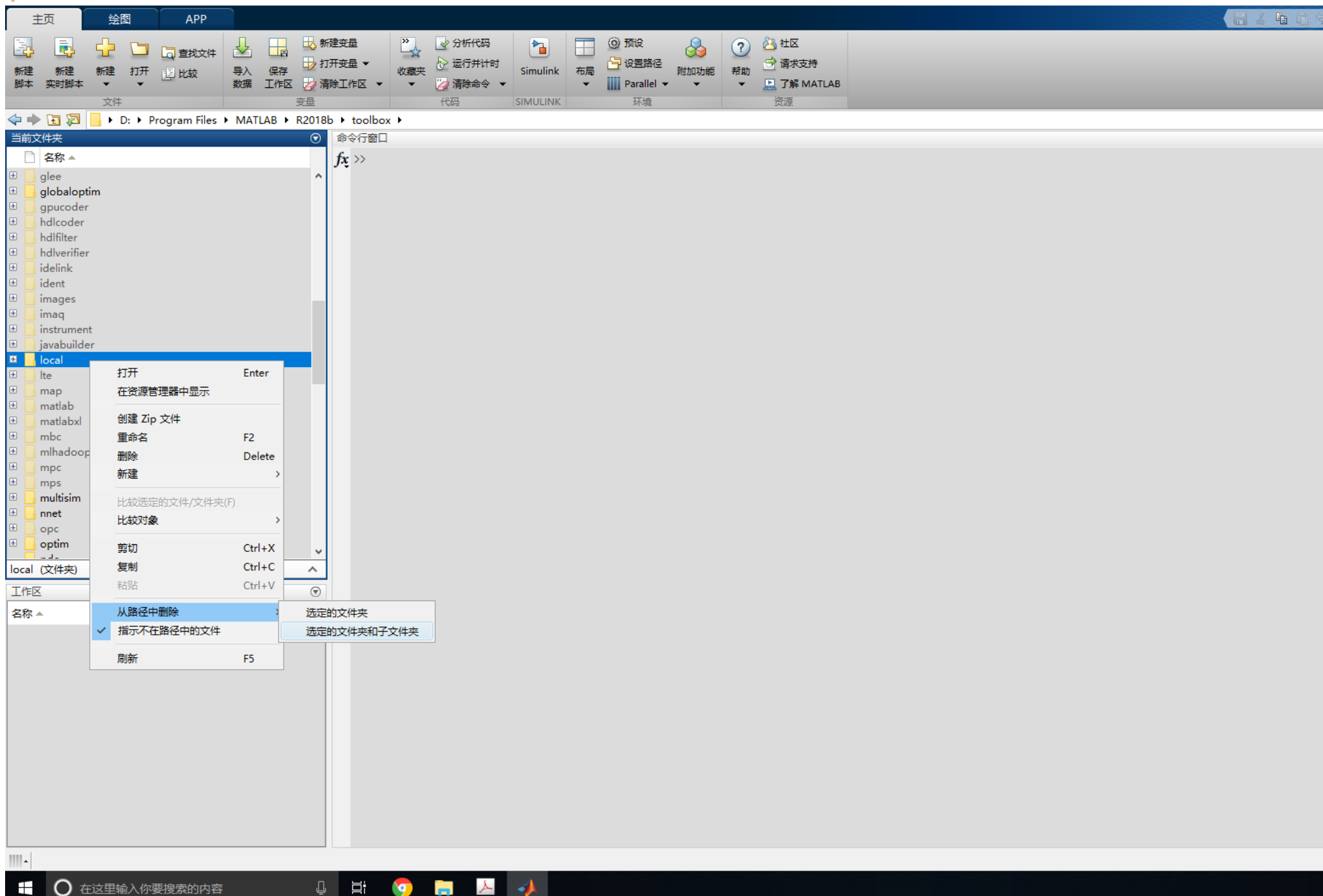
此电脑 > 软件 (D:) > Program Files > MATLAB > vlfeat-0.9.21-bin				
	名称	修改日期	类型	大小
看看 taught	apps	2019/12/30 19:57	文件夹	
	bin	2019/12/30 19:57	文件夹	
	data	2019/12/30 19:57	文件夹	
	doc	2019/12/30 19:57	文件夹	
	docsrc	2019/12/30 19:57	文件夹	
	make	2019/12/30 19:57	文件夹	
	src	2019/12/30 19:57	文件夹	
	toolbox	2019/12/30 19:57	文件夹	
	vl	2019/12/30 19:57	文件夹	
	vlfeat.xcodeproj	2019/12/30 19:57	文件夹	
	.gitattributes	2018/1/12 5:14	GITATTRIBUTES ...	1 KB
	.gitignore	2018/1/12 5:14	GITIGNORE 文件	1 KB
	COPYING	2018/1/12 5:14	文件	2 KB
	Makefile	2018/1/12 5:14	文件	12 KB
	Makefile.mak	2018/1/12 5:14	Makefile	18 KB
	README.md	2018/1/12 5:14	MD 文件	6 KB
	vlfeat.sln	2018/1/12 5:14	Visual Studio Sol...	1 KB
	vlfeat.vcproj	2018/1/12 5:14	VC++ Project	13 KB

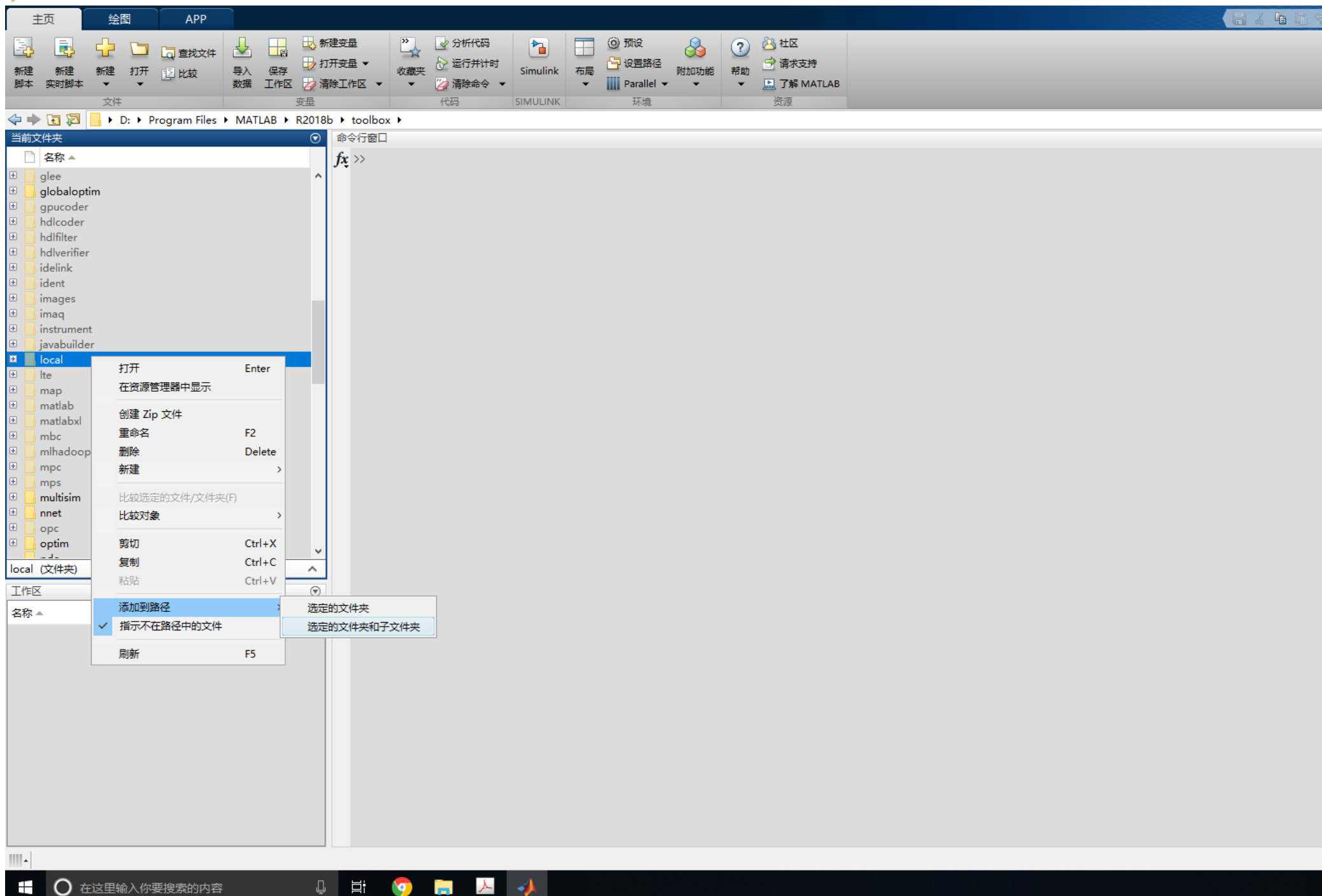
3. 打开D:\Program Files\MATLAB\R2018b\toolbox\local, 新建startup.m文件, 写入run('D:\Program Files\MATLAB\vlfeat-0.9.21-bin\toolbox\vl_setup')并保存



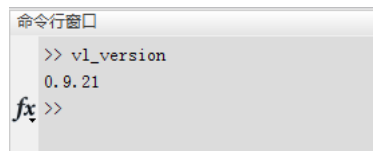
4. 将D:\Program Files\MATLAB\R2018b\toolbox中的local整个文件夹及其里面的文件全部添加到路径

在当前文件夹中找到local文件夹，右击local文件夹，先从路径中删除local文件夹及子文件夹，然后再右击local，全部添加到路径，这样startup.m文件就添加到路径中了，打开MATLAB会自动运行该文件。当然也可以把startup.m文件放到其他位置，只要文件添加到路径中即可。





5. 关闭MATLAB，再重新打开MATLAB，在命令行窗口输入vl_version，如果出现版本号，则说明配置成功



```
命令窗口
>> vl_version
0.9.21
fx >>
```

6. 注意

- 1). startup.m文件是用户自己定义的，MATLAB中没有的，要自己新建脚本文件，写进程序。
- 2). 关闭MATLAB，再重新打开MATLAB，运行vl_version，如果提示未找到文件，多半是因为startup.m文件没有添加到路径，找到startup.m文件存放的文件夹，添加文件夹及其子文件到路径中即可。
- 3). VLFeat库文件可以存放到其他位置，相应地startup.m中的路径要改，startup.m文件也可以存放到其他位置，相应地startup.m所在的文件夹要添加到路径中。
- 4). VLFeat.org[官网](#)中提供了[教程](#)以及[MATLAB API](#)，方便查询。