INSTALLATION

Matlab users

Download all files and folders from the project's Github site: https://github.com/nsdesai

This download includes not only code specific to this project but code written by others which the project exploits. This code includes:

- CaImAn (CNMF algorithm) from the Flatiron Institute: https://github.com/flatironinstitute/CaImAn.
- PatchWarp (motion correction and image registration) from Hattori and Komiyama: https://github.com/ryhattori/PatchWarp/tree/main
- MLSpike (spike estimation) from Deneux and colleagues: https://github.com/MLspike/spikes
- Brick (toolbox of general functions to speed up MATLAB) from Thomas Deneux: https://github.com/MLspike/brick

Put all download files and folders in a single folder somewhere on your hard drive. For example, the folder could be located within the MATLAB folder in Documents, but this is not necessary.

Add the folder to the MATLAB path. On my computer, the folder is located at this address: 'C:\Users\niraj\Documents\MATLAB\detect_software'. To add it to the path, I would enter these lines at the MATLAB command line:

```
folderName = 'C:\Users\niraj\Documents\MATLAB\detect_software';
addpath folderName
savepath
```

You can do the same, remembering of course to change folderName to the location of your folder.

Other users

Windows users who do not have a MATLAB license should go to this OneDrive site: standalone_detect_install . It contains a link to the installation folder for the standalone version. (A couple of the files are too big for distribution directly through Github, which has a 25 MB limit, and so they are stored elsewhere.) The installation folder includes three subfolders: *for_redistribution*,

for_redistribution_files_only, and *for_testing*. Download these three folders and place them in a folder on your computer (it doesn't matter where or what the folder is named).

Look inside the subfolder *for_redistribution* for an executable called *MyAppInstaller_web.exe*. Running this program will install both the project's software and MATLAB Runtime. The second of these will be downloaded from the web, meaning that your computer will need an Internet connection. The process will take ~10 minutes.

Once the installation is completed, you should see an app called *detect* in your computer's list of applications. You should be able to run it like any other Windows app. (Note: Depending upon your computer's security settings, the first time you run *detect*, you might get a message asking whether you want Windows Firewall to accept actions *detect* wants to make. Select **ACCEPT**.)