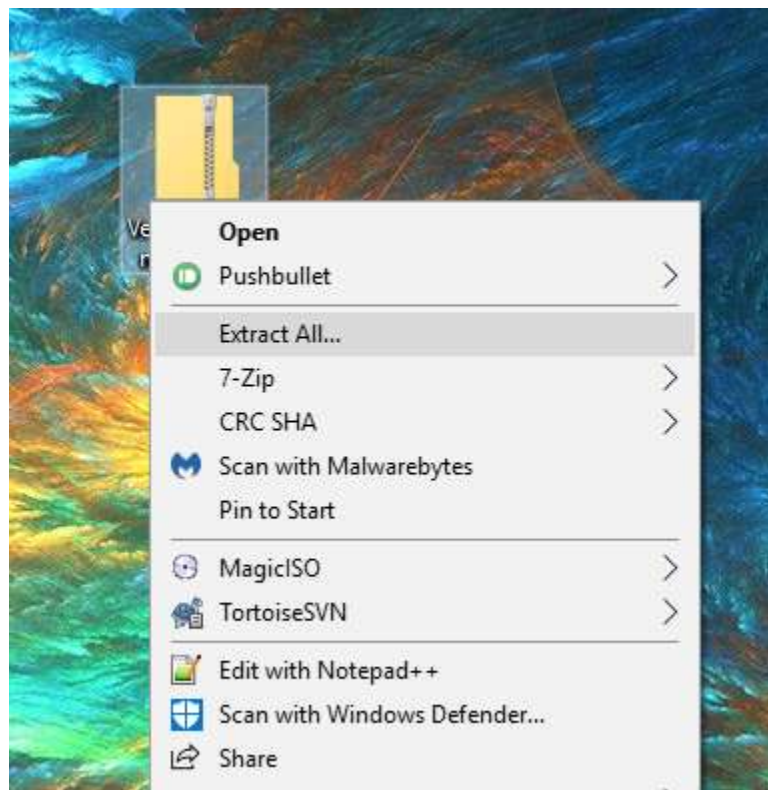


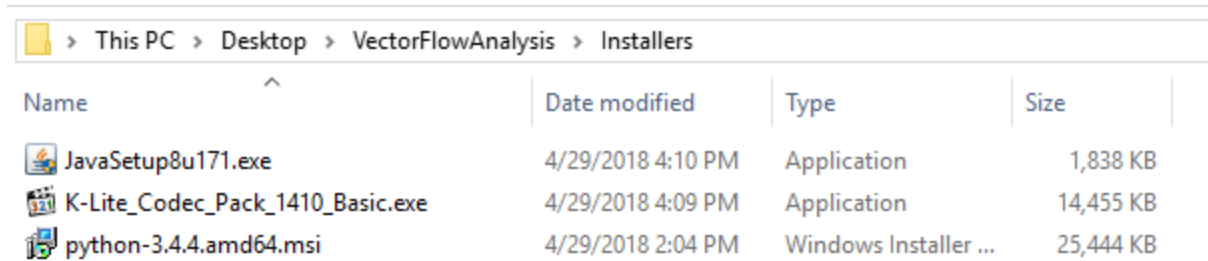
VFI Analysis Installing Instructions




The following are instructions for running the VFI Analysis program. Steps 1 – 7 only need to be done once per computer. If you have already completed steps 1-7, you may skip to step 8.

1. Assuming you obtained the code as a .zip file, you must unzip the folder and extract it where ever you like. To unzip a folder, you can right-click the folder, choose “Extract All...”, and choose a destination where you would like to save the unzipped folder.

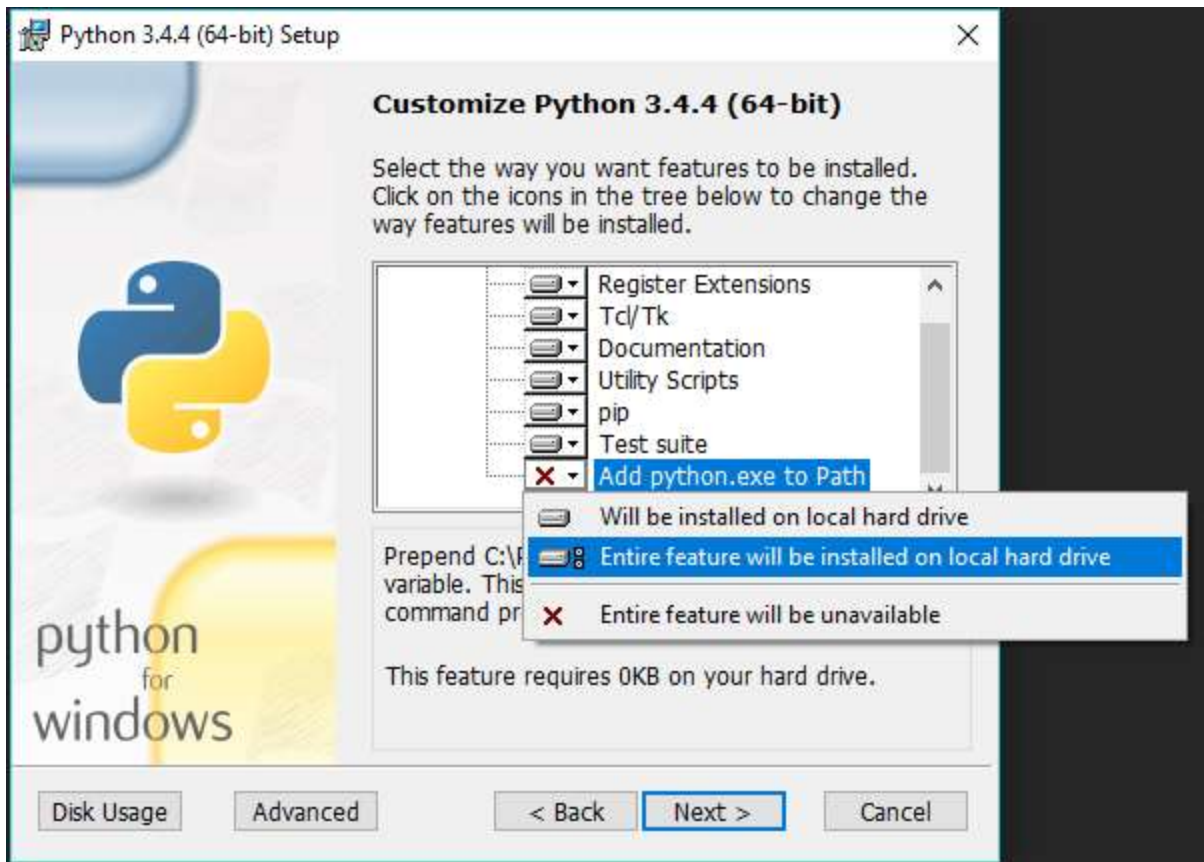


2. Navigate to the unzipped folder.
3. Navigate to the VectorFlowAnalysis > Installers folder. In the folder there will be three files as seen in the figure below:



This PC > Desktop > VectorFlowAnalysis > Installers			
Name	Date modified	Type	Size
 JavaSetup8u171.exe	4/29/2018 4:10 PM	Application	1,838 KB
 K-Lite_Codec_Pack_1410_Basic.exe	4/29/2018 4:09 PM	Application	14,455 KB
 python-3.4.4.amd64.msi	4/29/2018 2:04 PM	Windows Installer ...	25,444 KB

4. Just like you would for any other program, double click one and follow the instructions to begin installation. For the JavaSetup and K-Lite_Codec_Pack simply follow the instructions and continue hitting next. No special changes need to be made while installing them. For the python-3.4.4 installation, continue to step 5 for more specific instructions.
5. For the third program to install, python-3.4.4, it will be the same process as the other two files (keep clicking next) with one small but important change. When you reach the screen “Customize Python 3.4.4” (which can be seen in the following picture), please scroll to the bottom and find “Add python.exe to PATH” and choose “Entire feature will be installed on local hard drive.” You will now if you have chosen correctly if the red X turns to a grey rectangular icon. Afterwards, finish the installation as normal and click next.



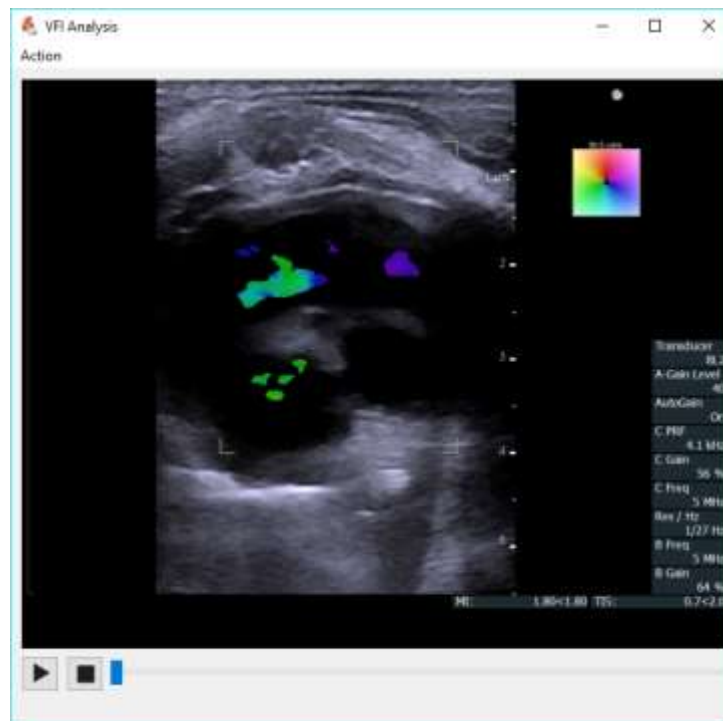
6. After finishing the installation of all three files in the “Installers” folder, go back one folder to the main folder, “VectorFlowAnalysis.” It should like the picture below:

<div> <div> <div></div> <div></div> </div> <div> <div></div> <div></div> </div> <div>VectorFlowAnalysis</div> </div>				
Name	Date modified	Type	Size	
images	4/21/2018 11:30 AM	File folder		
Installers	4/29/2018 4:10 PM	File folder		
lib	4/23/2018 7:39 PM	File folder		
src	4/29/2018 12:54 PM	File folder		
tests	4/5/2018 5:41 PM	File folder		
wheels	4/29/2018 3:05 PM	File folder		
.gitignore	4/29/2018 4:11 PM	Text Document	2 KB	
Installer.bat	4/29/2018 3:27 PM	Windows Batch File	1 KB	
Launcher.bat	4/29/2018 3:43 PM	Shortcut	5 KB	
LICENSE	4/5/2018 5:41 PM	File	2 KB	
README.md	4/5/2018 5:41 PM	MD File	1 KB	

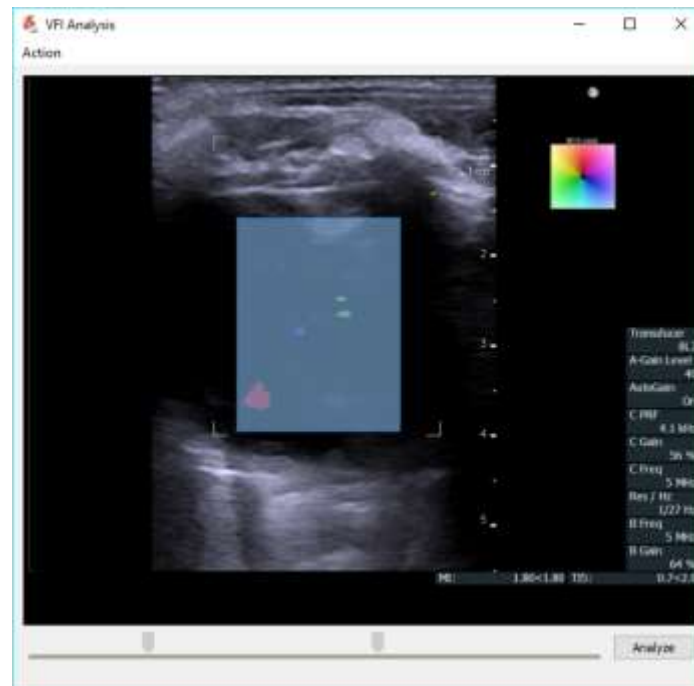
7. Double-click the “Installer.bat” file in the VectorFlowAnalysis folder. This should open a black window called a command prompt and it will begin downloading the appropriate dependencies needed for the program. Wait until it is finished, and the window will close on its own.
8. Lastly, go to the following folder: VectorFlowAnalysis > src > Server. Once there, find the “build.bat” file and double-click it to launch the program.
 - a. For convenience, you may right-click the “build.bat” file and choose “Create Shortcut.” This will create a “build.bat – Shortcut” file that can also be used to launch the program from wherever you like. Simply move the “build.bat - Shortcut” file (but not the original “build.bat” file) wherever is most convenient. You may also rename this shortcut to whatever you like. However, if you move the VectorFlowImaging folder from where it originally was when you created the shortcut, the shortcut will no longer work, and you will need to create another shortcut.

FUNCTIONALITY

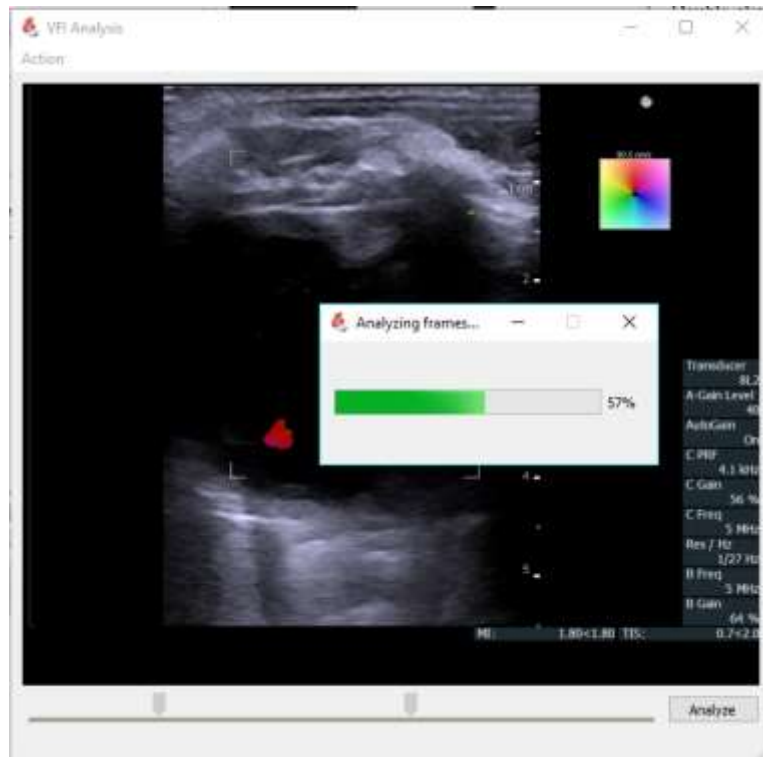
There are three different states the GUI can be in: the video player state, the analyze state, and the processing state. Pictures can be seen below:



Video Player



Analyze Window



Processing Window

The video state can be used to load a video and play/pause/stop the video if one is uploaded.

The analyze state is used to determine what the program should analyze. The range slider at the bottom of the screen allows the user to only analyze a certain sub-clip of the original video loaded. In addition, the user can click and drag across the video while in the analyze state to designate a specific area they would like to analyze (omitting the non-selected areas).

The processing state indicates that the input .avi file is being processed and will be finished when the progress bar hits 100%.

To view the source code (which is not necessary to run the application) go to the following:

<https://github.com/Capstone10UARK/VectorFlowAnalysis>