Passive acoustic multi-labelling tool – Installation Guide

This guide provides basic instructions for getting started with applying multi-class labels to passive acoustic monitoring using the UOS Labelling Tool 'HydroSeek'. Each step is critical to avoid any issues with the app at a later stage – please follow this guide carefully.

Installing hydroSeek

Prior to installing the app you must have MATLAB installed. If you have not yet installed this please do so using the following link:
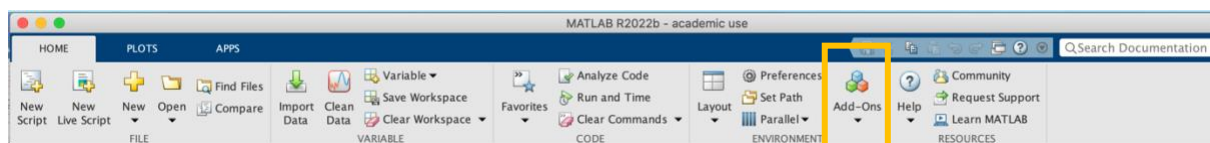
https://tinyurl.com/4ykc2bx6

Please try to install version 2023 or later.

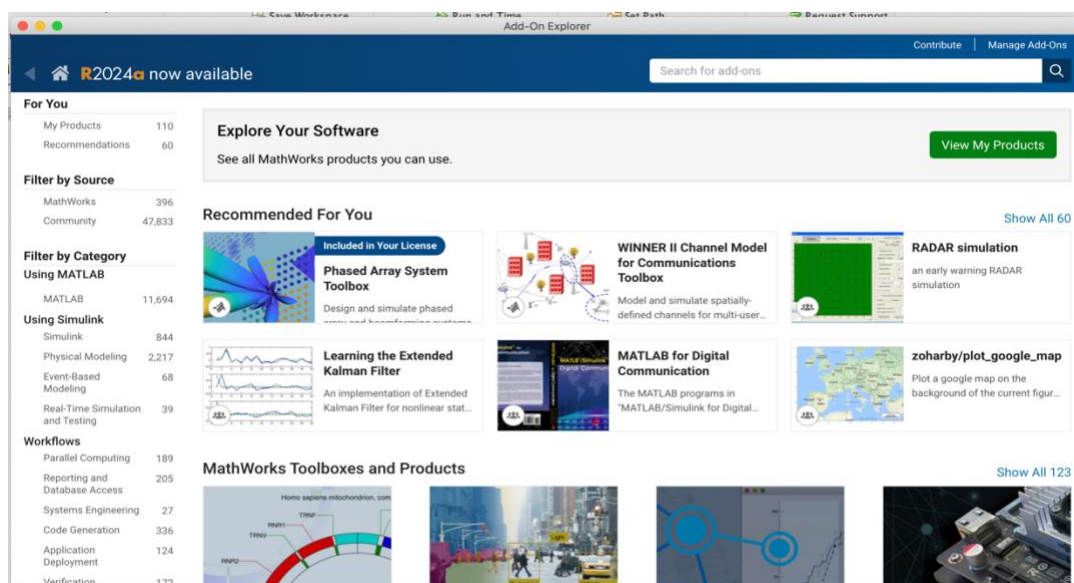Once Matlab is installed, you will need two toolboxes in order to use hydroSeek:
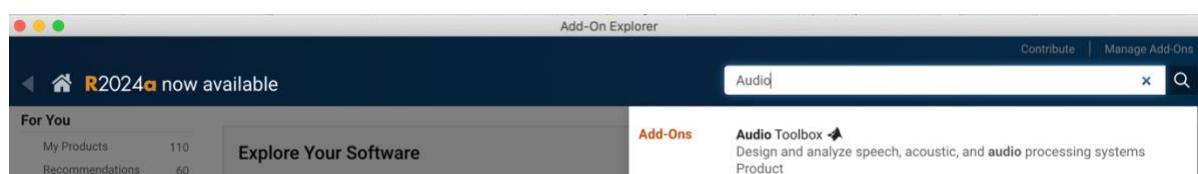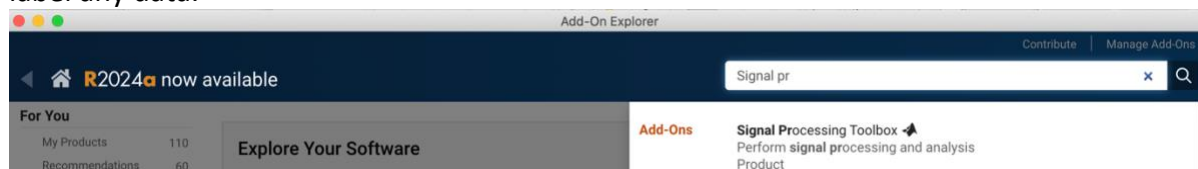Audio Processing
Signal Processing
To install a toolbox navigate to 'Add-Ons' on the Home menu. Press 'Add-ons'.

The following window will pop up. In the 'Search for add-ons box' search for the Audio toolbox and select install. Repeat for the Signal processing toolbox.
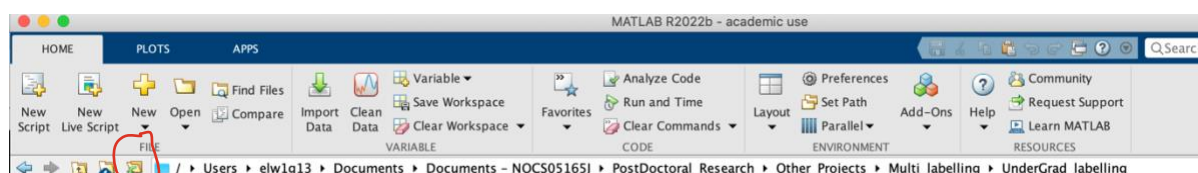
The following screenshots display the specific toolbox you need to download. For context, some of the functions within the back end of the code for the app depend on these toolboxes. If you skip this step the app will run with many errors and you will be unable to label any data.

Once the required toolboxes have been installed, close down matlab and re-open it. This step is to ensure Matlab opens with all the required toolboxes ready to go.
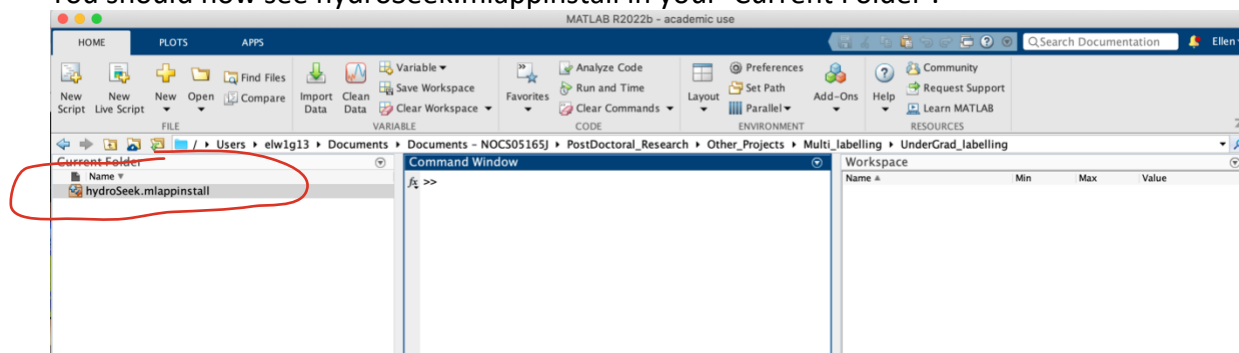
Note: If you are using a university workstation you may need to follow these steps, or you will find they are already installed. If you move to a new workstation each time you will need to check these toolboxes are installed each time.

With matlab re-opened you need to tell matlab where to find the app. Use the file directory search button to navigate to the folder you have hydroSeek stored in. If you haven't yet opened the Zip file, please do this in your file explorer before searching for it in Matlab.
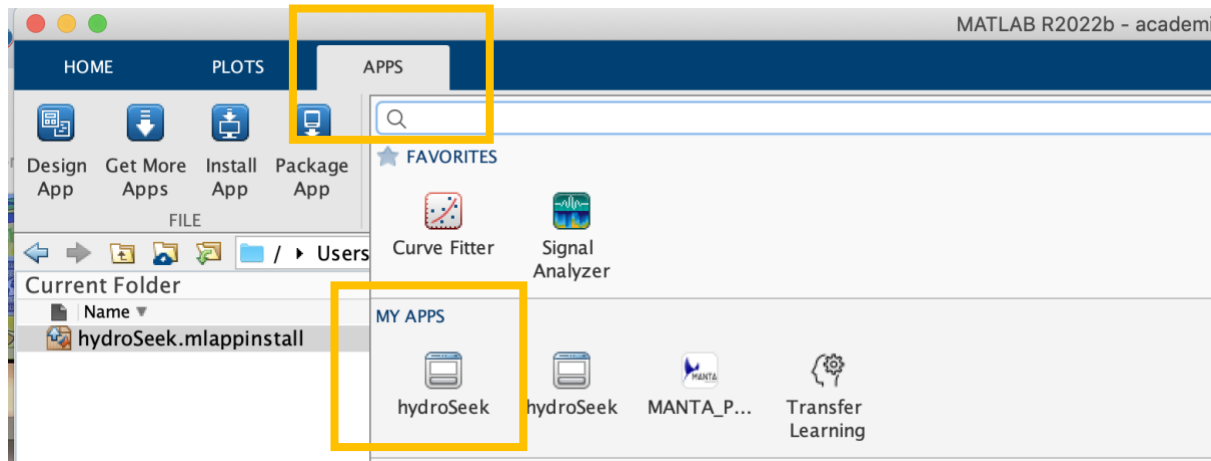

Example of my directory. The button which is circled allows you to select your folder. For me, the hydroSeek app is stored in the folder 'Undergrad_labelling'.

You should now see hydroSeek.mlappinstall in your 'Current Folder'.

To install the app simply double click on the hydroSeek.mlappinstall file. Installation is very quick. It is now stored in 'Your apps'.

To launch the app you simply navigate to the 'Apps' tab on the toolbar, and select 'hydroSeek' within 'My Apps'. You will do this every time you want to use the app to label data.

You are now ready to start labelling!!

I recommend loading in the file 'Clipped_One_Min.wav' first. This is 60 seconds of data which will load in quickly and allow you to check the app is functioning correctly on your computer. Skip through using the 'Load Next Frame' button, don't worry about applying labels, although feel free to use it to practice. On the final frame when you press 'Next' it should automatically save a csv file with the same name to wherever you loaded the wav file from. It will also shut itself down and re-load a new labelling window ready to start fresh

If you get the following error when the app is trying to re-launch itself:

Simply press 'add its folder to the MATLAB path' (where I have highlighted in yellow). Then relaunch the app manually. At the end of the next file the app will self-launch.