CPCZurich2019 Tutorials – ADVANCED CONNECTIVITY Installation Guide

Part 1 – HUGE Toolbox

In order to install the ***H**ierarchical **U**nsupervised **G**enerative **E**mbedding* Toolbox, please follow these steps:

1) **Install Matlab:** For this tutorial, you need Matlab with the statistics toolbox. We recommend using Matlab R2016a or newer (https://www.mathworks.com/products/get-matlab.html).

2) **Install a C Compiler:** For the HUGE Toolbox, you need a C-compiler alongside Matlab. We recommend **MinGW** (Windows), **Xcode** (Mac) or **GCC** (Linux) which are available free of charge. Detailed instructions can be found at: https://ch.mathworks.com/support/requirements/supported-compilers.html.

3) **Download TAPAS** (*Translational **A**lgorithms for **P**sychiatry **A**dvancing **S**cience*): Download the TAPAS toolbox (as zip-file) at: https://translationalneuromodeling.github.io/tapas/#download.

4) Put the code and the material in a folder/directory which you will use for the practical tutorial (e.g. Desktop/CPC2019/AdvancedConnectivityTutorial). **Make sure you do not have any spaces in the titles of your folders!**

5) **Open Matlab**. You will see the following interface:

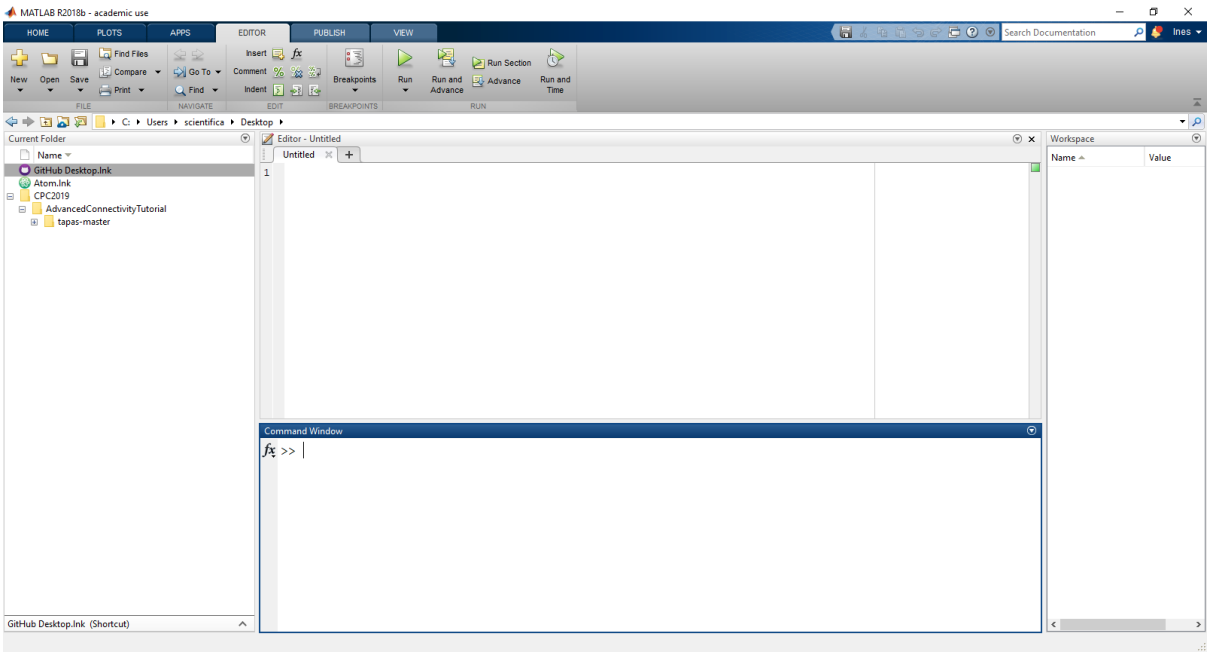

Fig. 1: Illustration of MATLAB interface.

6) **Setup TAPAS:** Unzip the zip-file and add the "tapas/huge" folder to your Matlab path by, in Matlab, navigating to the folder/directory you prepared (e.g. "AdvancedConnectivityTutorial"). Then right-click on the directory and "Add to Path", "Selected Folders and Subfolders".

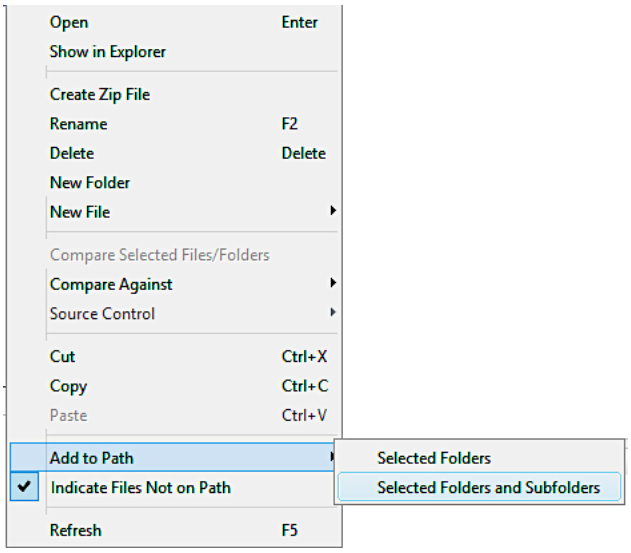

Fig. 2: Illustration of how to add a path (and all its subfolders) in MATLAB.

7) **Tutorial Files:** Open the file "**tapas_huge_demo.mlx**" and "**cpc_practical_exercise_huge.m**" (also save it to where you saved the other code, e.g. Desktop/CPC2019/AdvcancedConnectivityTutorial).

8) **You may look at the "tapas_huge_demo.mlx" before the Practical Tutorial Session.**

Part 2 – rDCM Toolbox

In order to install the ***r**egression **D**ynamic **C**ausal **M**odeling (rDCM)* Toolbox, please follow these steps:

1) Open Matlab and, in Matlab, navigate to the directory where the TAPAS toolbox is stored. For the rDCM toolbox, go inside the TAPAS folder and add the folder "rDCM" (with all its subfolders) to the current MATLAB path. To do this, right-click on the rDCM folder and select "Add to path" – "Selected folders and subfolders" (See Fig 2).

2) As for the HUGE Toolbox, you will need a C-compiler alongside Matlab (See above).

3) If you are keen, you could already have a look at the manual of the toolbox and run the short beginner's tutorial: tapas_rdcm_tutorial.

If you have trouble getting to this point before the Practical Tutorial Session, please contact Inês Borges Pereira (inesb@student.ethz.ch). In person assistance is preferred and will be provided during the Tuesday and Wednesday lunch breaks. Please find Inês at the entrance of the lecture hall after the morning talks are finished. She will wait there for 5 minutes.