CPCZurich2022 Practical Tutorial C – Active Inference with pymdp

Installation Guide

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For the Active Inference tutorial, we will be live-coding an active inference simulation together in Google Colab, a web-based platform where users can run Python code in an interactive, notebook-style environment. You can think of Colab Notebooks as Jupyter notebooks that are saved on Google Drive.

We will be mainly using the Python package pymdp to create and simulate active inference processes.

Because everything in Google Colab is cloud-based, **you don't need to install anything (even Python) locally** – the only requirement to use Google Colab is that you have a Google account and are logged into it.

We will be live-coding as a group, starting with the following Colab notebooks:

CPC2022 – Active Inference Live Coding, Part I

https://colab.research.google.com/drive/1To2WPRxgraDVvAyBWjxmzNQLLobGvrQ8?usp=sharing

CPC2022 – Active Inference Live Coding, Part II

https://colab.research.google.com/drive/1K76SkmaBwjwUvQmx6NJO6bUW9Sa9vq15?usp=sharing

Please open the Colab notebooks given by the links above (start with **Part I**), and then save your own copy of the notebook via "File ➔ Save a Copy in Drive" (see screenshot

below). Once you make a copy of the notebook, you can run and edit code in your own version as we write and run code blocks together. This will allow you to follow along at your own pace and explore the code in your own way as we step through each notebook in order.
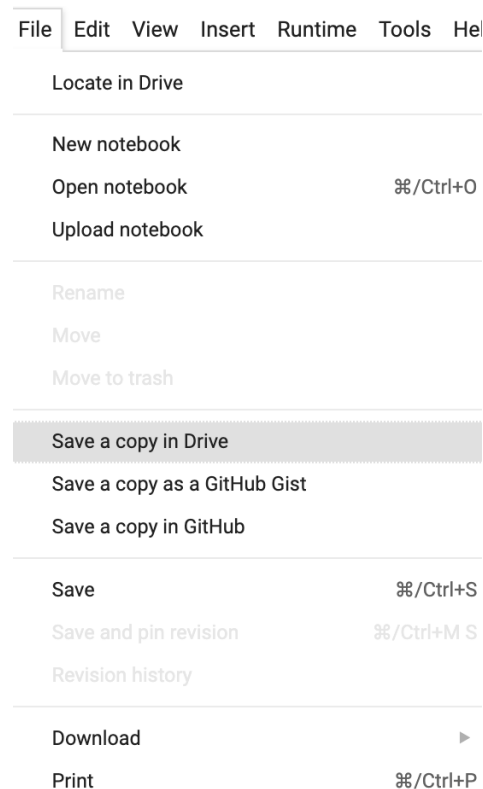
Now you're all set up for the Practical Tutorial session – you can start running and editing code blocks in your personal copy of the tutorial notebooks and following along as we live-code ☺. During the tutorial, we will live-code **Part I** together during the first session (~ 1.5 hours), and **Part II** during the second session (~ 1.5 hours).

If you have trouble getting to this point before the Practical Tutorial Session, please consult the **#tutorial-helpdesk channel on Slack**. You will be given access to the CPC Slack workspace at the beginning of the course. Check if anyone has had the same issue and has managed to solve it and how. If no one else has encountered the same problem, post your question. **Alex** will be monitoring the channel and providing support. In addition, given the volume of attendees this year, we would be really grateful if you could assist us by answering queries on Slack yourself if you come across a problem you know and have solved.

For those who need more personalized help, Alex will be offering support hours. More information on the exact time will follow.