## JupyterHub User Guide

This document is the introduction of JupyterHub, where you can write and execute your code.

## Start JupyterHub

- Go to https://hub.cse.kau.se/
- Log in with KAU ID and password and Start Server.
- If you are a GPU user, choose the CPU/GPU server to execute code (CPU user will log into an available CPU server without seeing the following interface).

Cjupyter <mark>hub</mark> Home Token A	Admin	KauID [→Logout
Select available CPU/GPU	GPU HOST Amount of available GPU3090 - 24GB - Available GPUs 0/2 GPUA40 - 48GB - Available GPUs 3/6 No GPU Not available to select	
[	Start Sta	rt

- Select a kernel under "Notebook" and start your journey.

File   Edit   View   Run   Kernel   Git     +   •   •   •   •   C	Zabs     Settings     Help       Launcher     +
	work Notebook
MyFolder 11d ago MyFile.ipynb 47s ago	Python 3 (pykernel)*       C++17       Desktop [2]       Julia 1.10.5*       Putro Notebook [2]       R*       Select a kernel here.         Console       Image: Console       Image: Console       Image: Console       Image: Console
start your work.	Python 3 (ppykernel)*       C++17       Julia 1.10.5*       R*         S       Other
	Image: Second system     Image: Second system
Simple 💴 0 🛐 1 🤃 🚸	Launcher 0

 If you are a GPU and tensorflow user, please limit the memory growth through *tf.config.experimental.set\_memory\_growth* or *tf.config.set\_logical\_device\_configuration* (more information: <u>https://www.tensorflow.org/guide/gpu</u>)

## Stop the Server and logout

- Go to File -> Hub Control Panel -> Stop My Server -> Log out



 Remember to log out your account by click the "logout" button located in top-right corner before restarting JupterHub next time. If not, there will exist "500: Internal Server Error". When error happens, click "Home", "Logout", and then "Login" again.



## **Example Code**

A wide collection of programming examples is included in /\_PROJECTS\_/\_INFORMATION\_/examples/:

- Basic Python: example\_Python.ipynb
- Basic R: example\_R.ipynb
- Basic MariaDB: example\_mariadb.ipynb
- Machine Learning by Python: example\_ML\_Python.ipynb
- Machine Learning by R: example\_ML\_R.ipynb
- Deep Learning about Computer Vision by Python: example\_DL\_Python.ipynb