

Starting Hands On 4

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Instructions (detailed after)

1. Create a new workspace and launch it
2. Download the zip file of the source
https://gitlab.in2p3.fr/thomas.grenier/tp4ss_segmentation/-/blob/master/TP1.zip
3. Drag and drop this file in your workspace
4. Unzip it in /home
5. Double clic on : **01_UNET_TF2_test.ipynb** to launch the jupyter notebook of the hands-on and follow instructions of the notebook

1- Create a new workspace and launch it

Can be 20 minutes long ...

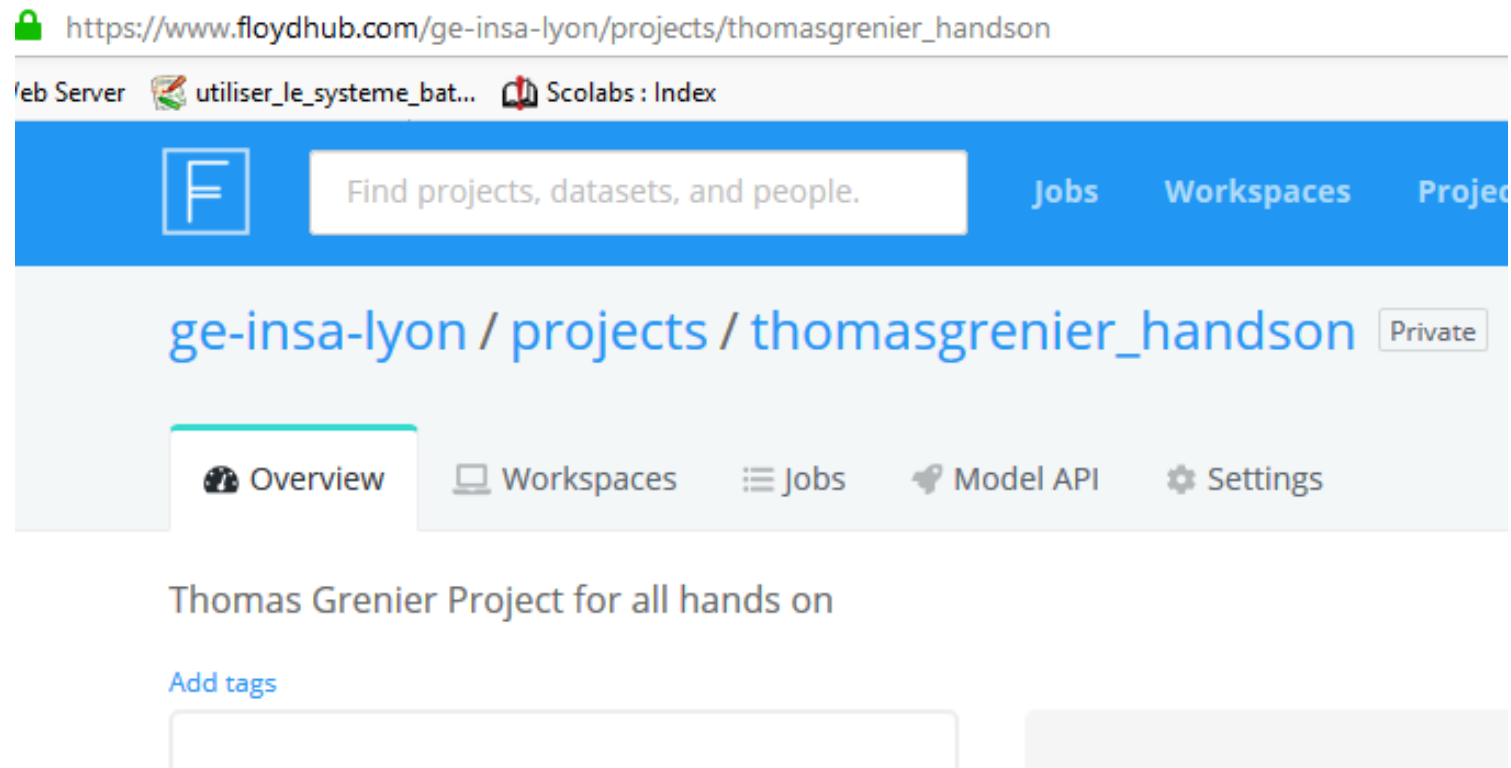
1- Create a new workspace and launch it

- First, go to **your project page**

- Find it on the list, or use the direct link access:

www.floydhub.com/ge-insa-lyon/projects/YourProjectName

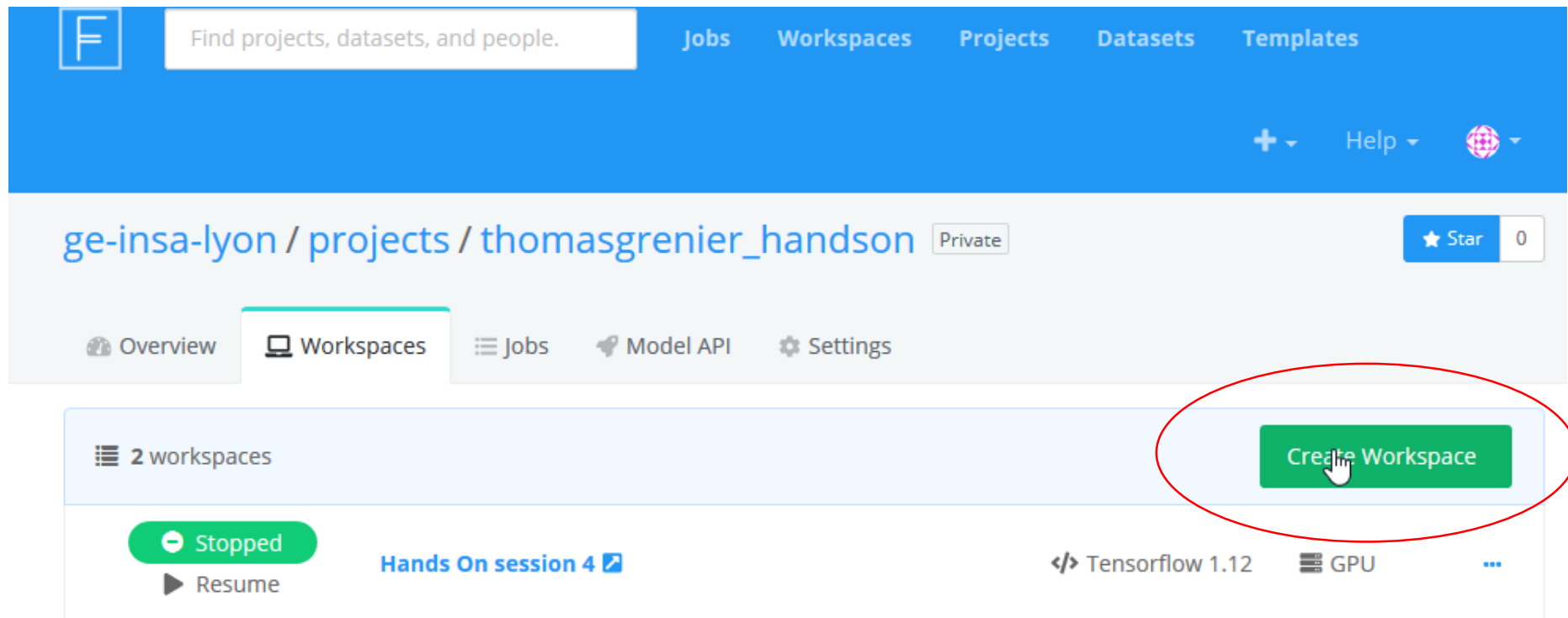
- For me :



The screenshot shows a web browser window with the URL https://www.floydhub.com/ge-insa-lyon/projects/thomasgrenier_handson. The browser tabs include 'Feb Server', 'utilisateur_le_systeme_bat...', and 'Scolabs : Index'. The page features a blue header with the FloydHub logo (a white 'F' in a blue square), a search bar containing the text 'Find projects, datasets, and people.', and navigation links for 'Jobs', 'Workspaces', and 'Project'. Below the header, the breadcrumb path is 'ge-insa-lyon / projects / thomasgrenier_handson' with a 'Private' status indicator. A navigation menu includes 'Overview' (selected), 'Workspaces', 'Jobs', 'Model API', and 'Settings'. The main content area displays the project title 'Thomas Grenier Project for all hands on' and an 'Add tags' link above a text input field.

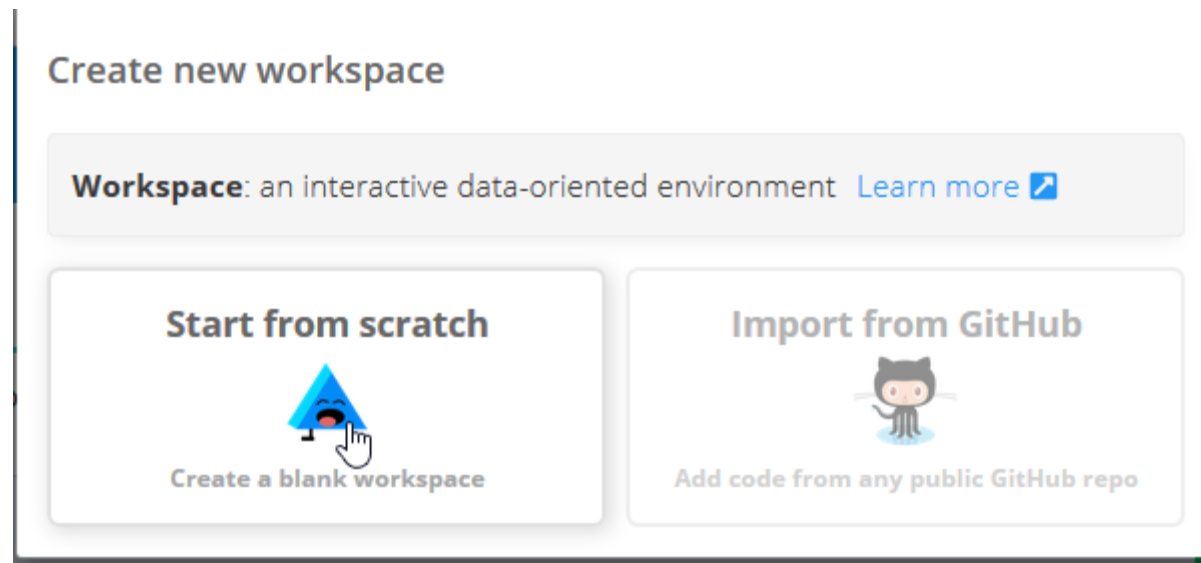
1- Create a new workspace and launch it

- Then click on the “Create Workspace” button



1- Create a new workspace and launch it

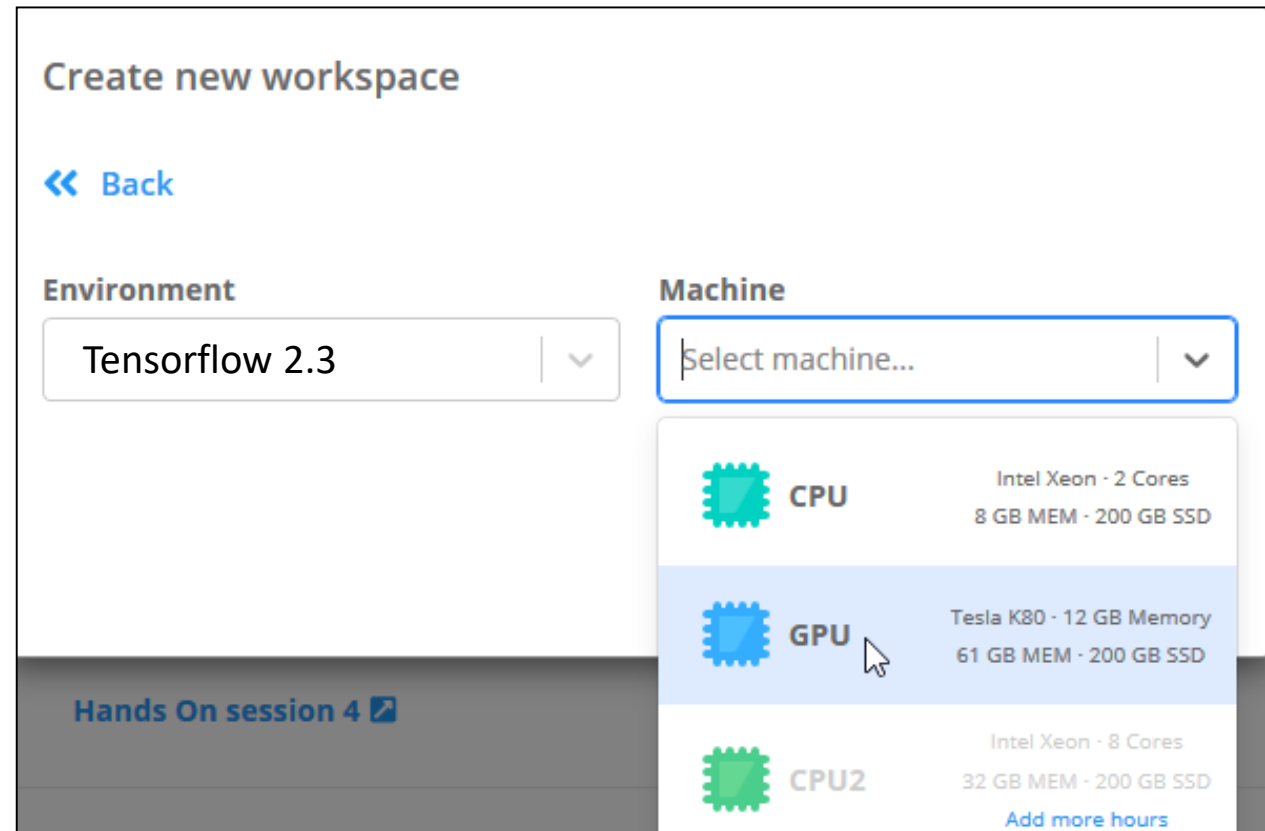
- On the following window, select “**Start from scratch**”



1- Create a new workspace and launch it

- Then you have to select the environment : **Tensorflow 2.3**
- Also, select the Machine on which your code will run.

→ If you have correctly associate your project to the team (owner) you can select **GPU**



The screenshot shows a web interface for creating a new workspace. At the top, it says "Create new workspace" with a "Back" button. Below this, there are two main sections: "Environment" and "Machine".

The "Environment" section has a dropdown menu currently set to "Tensorflow 2.3".

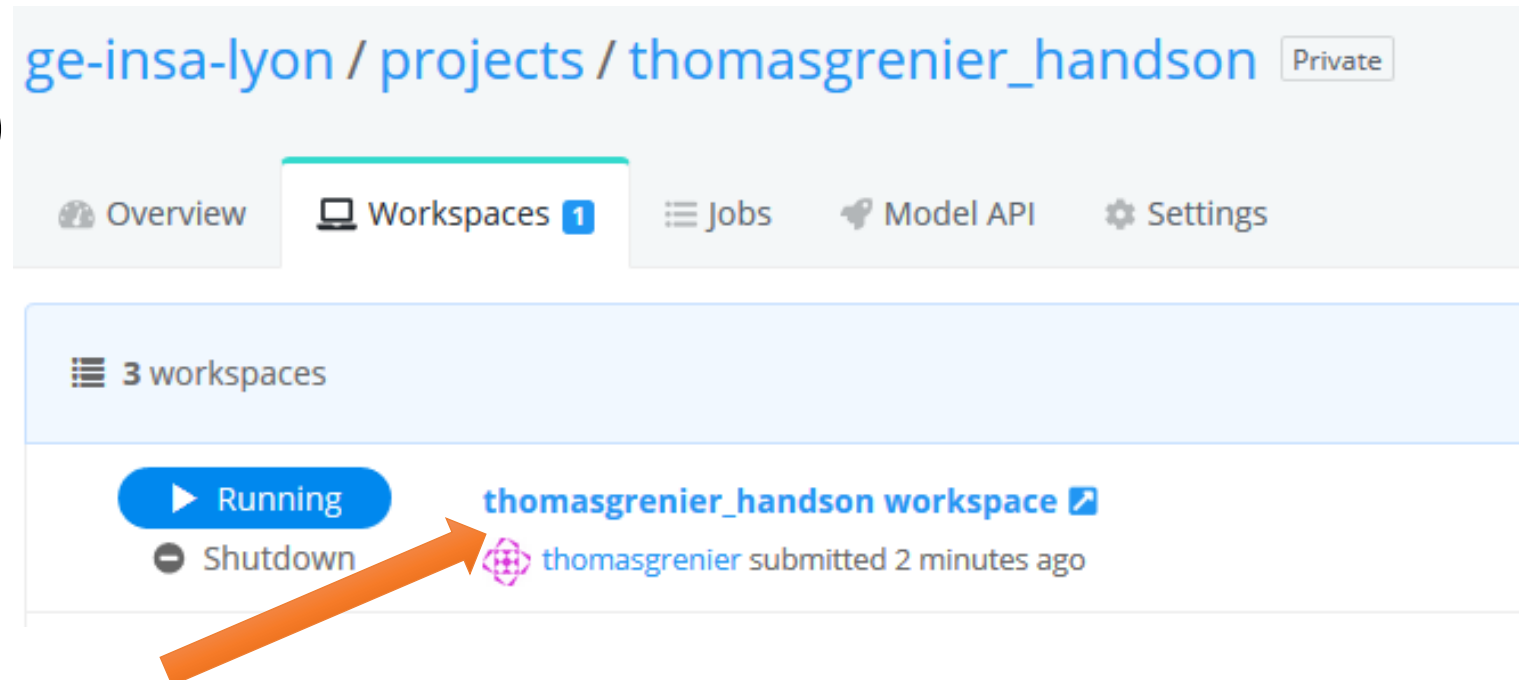
The "Machine" section has a dropdown menu labeled "Select machine...". Below this menu, there are three machine options listed:

- CPU**: Intel Xeon - 2 Cores, 8 GB MEM - 200 GB SSD
- GPU**: Tesla K80 - 12 GB Memory, 61 GB MEM - 200 GB SSD (This option is highlighted with a blue background and a mouse cursor is pointing at it.)
- CPU2**: Intel Xeon - 8 Cores, 32 GB MEM - 200 GB SSD

At the bottom of the interface, there is a link for "Hands On session 4" and a button for "Add more hours".

1- Create a new workspace and launch it

- You then create finalize the workspace creation by clicking the “Create Workspace”
- Attention please : when a workspace is created, it is automatically started !
 - To open it click on its name
 - You can wait 2 seconds or 20 minutes (provisioning)



- You then enter to the *jupyterlab* of the workspace

Rename the workspace here (see coming slides)

Launcher tab: useful for unzip files (next slide)

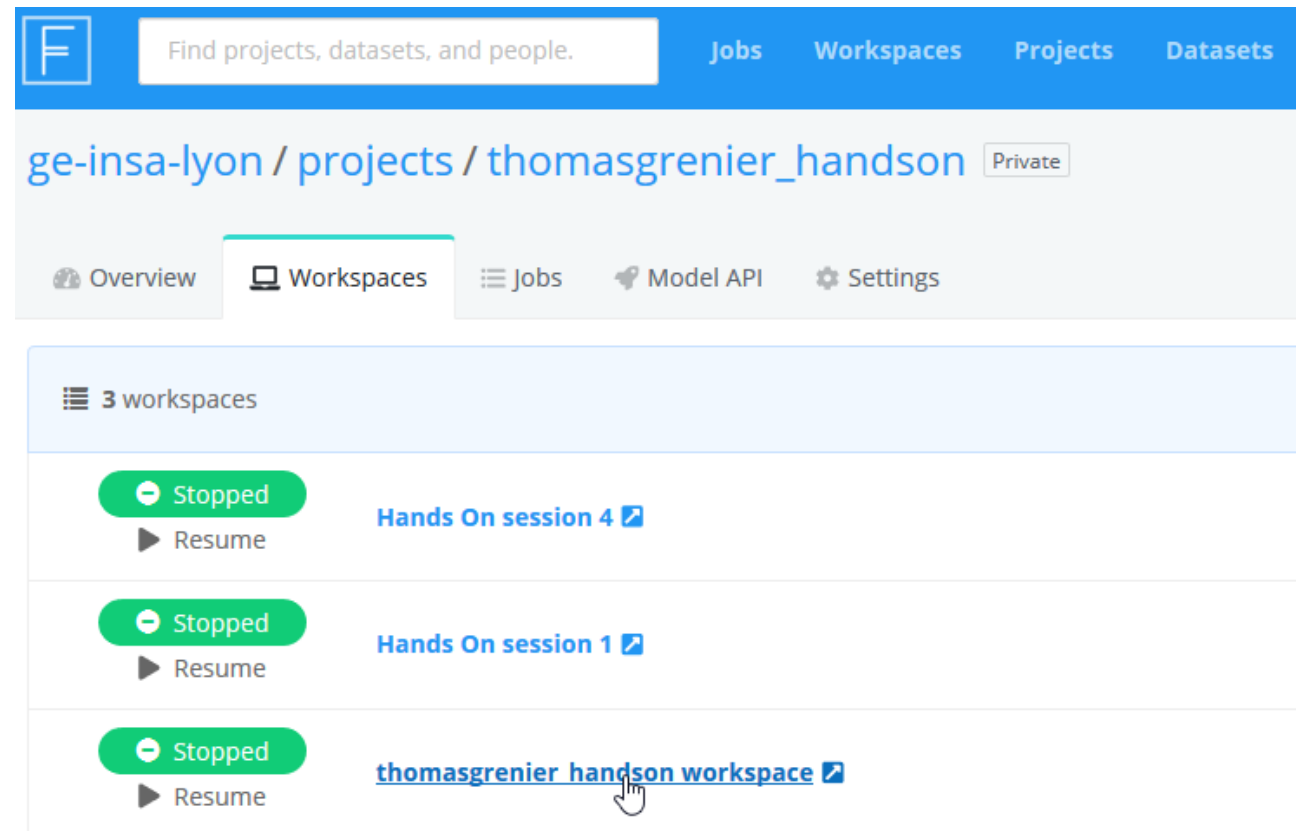
Information about machine and running/stopping workspace

The screenshot shows the JupyterLab workspace interface. At the top, the workspace name is 'thomasgrenier_handson workspace'. Below it is a menu bar with 'File', 'Edit', 'View', 'Run', 'Kernel', 'Tabs', 'Settings', and 'Help'. The main area is divided into three panes: a file browser on the left, a central workspace area, and a right-hand sidebar. The file browser shows a file named 'get_started_workspace.ipynb' with a red circle around the upload icon. The central workspace area has a 'Launcher' tab and a notebook titled 'get_started_workspace.ipynb'. The right-hand sidebar has tabs for 'Data', 'Settings', and 'Help'. The 'Data' tab is active, showing 'Attached datasets' (none), 'Add datasets' (with a search box), and 'Mount directory' (with a text box containing 'training_data' and an 'Attach dataset' button). Annotations include a yellow arrow pointing to the workspace name, a green arrow pointing to the Launcher tab, a blue arrow pointing to the top status bar, a red arrow pointing to the upload icon, an orange arrow pointing to the file browser, and a grey arrow pointing to the 'Attach dataset' button.

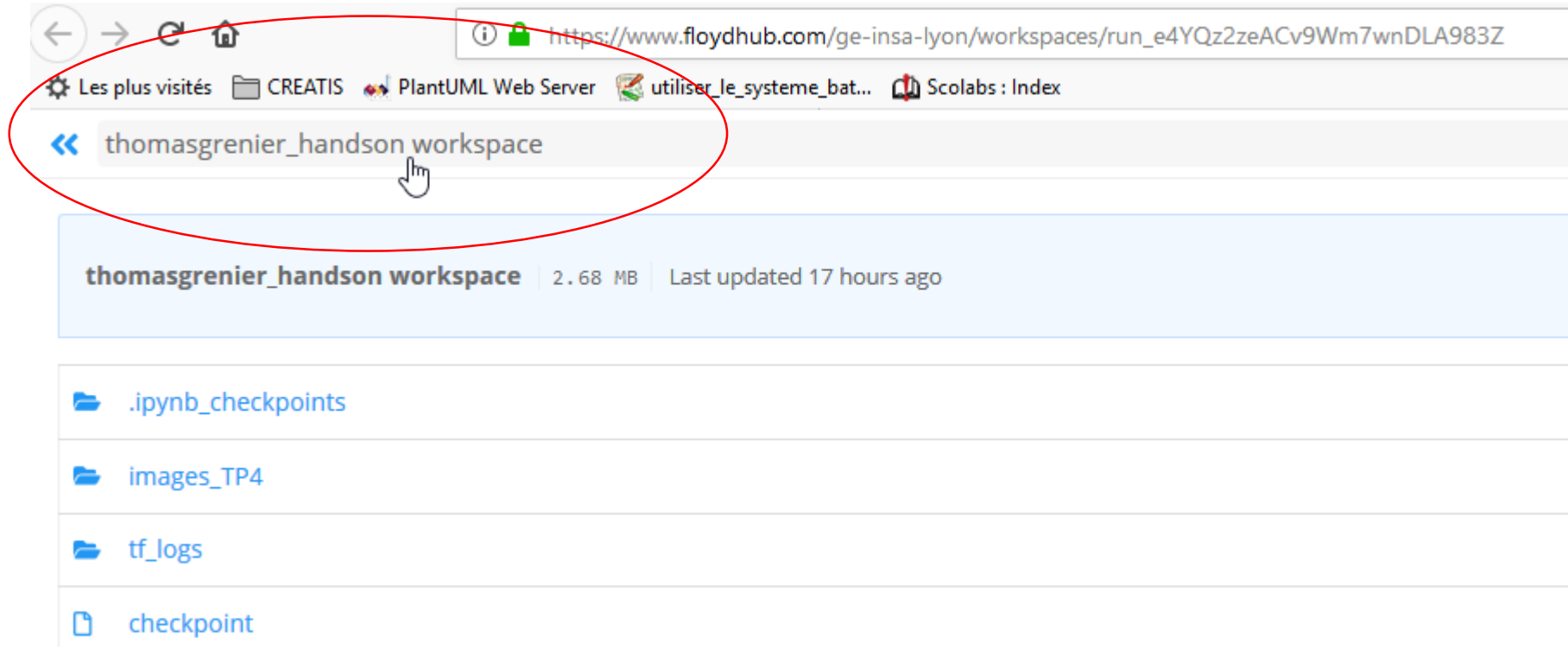
Drag and drop files here (or via the upload button)

Datasets can be attached to the workspace here

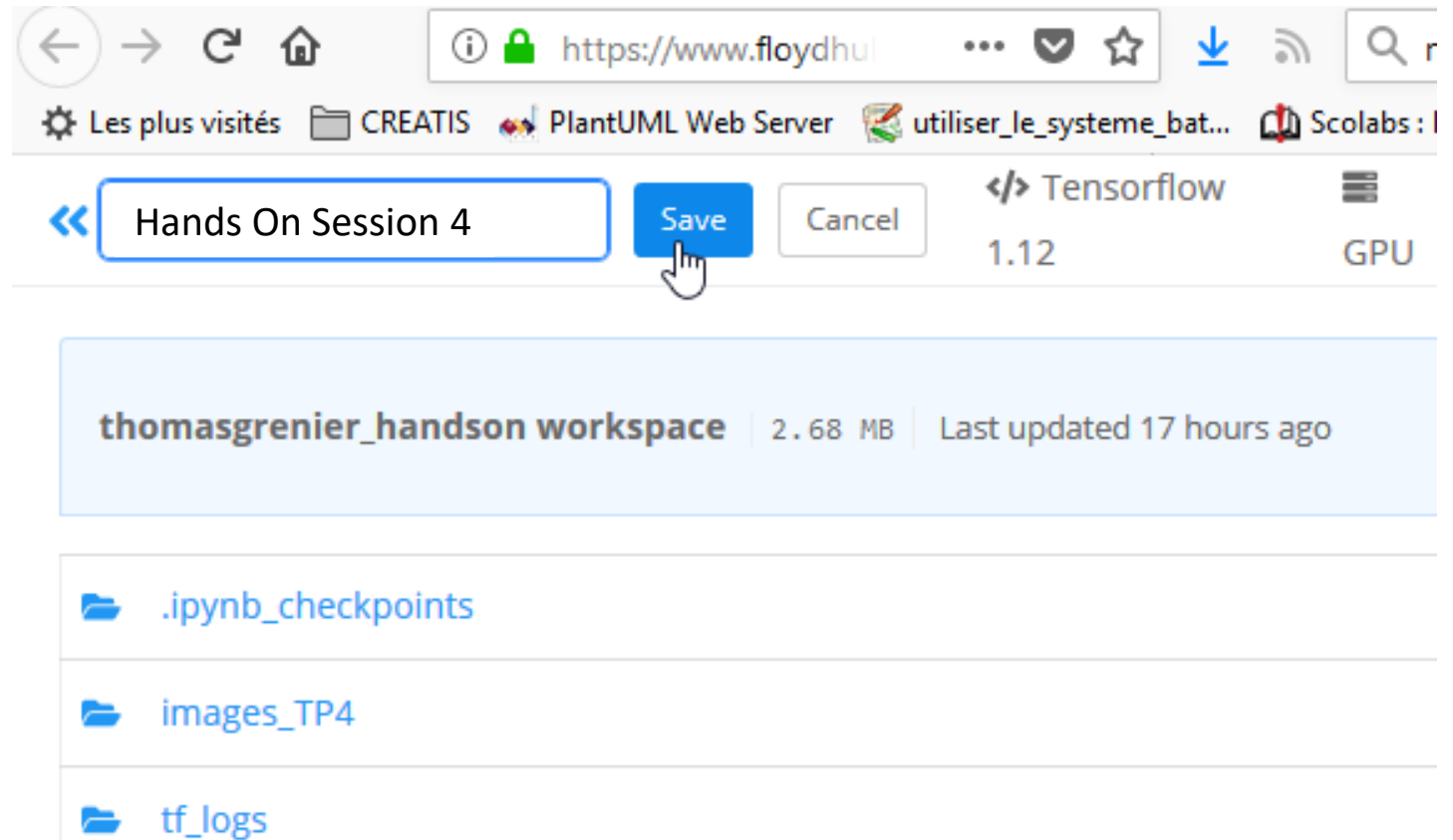
- **Recommended:** rename your workspace as you will have –at least- 4 workspaces in your project
 - First select the one you want to rename, simply clicking on it (the workspace can be running as in previous slide)



- Then, click on the workspace name as shown bellow



- Rename the workspace
- Don't forget to save your changes (click the Save button)
- Note that the “<<” allow you to return to your project page (in a new tab)

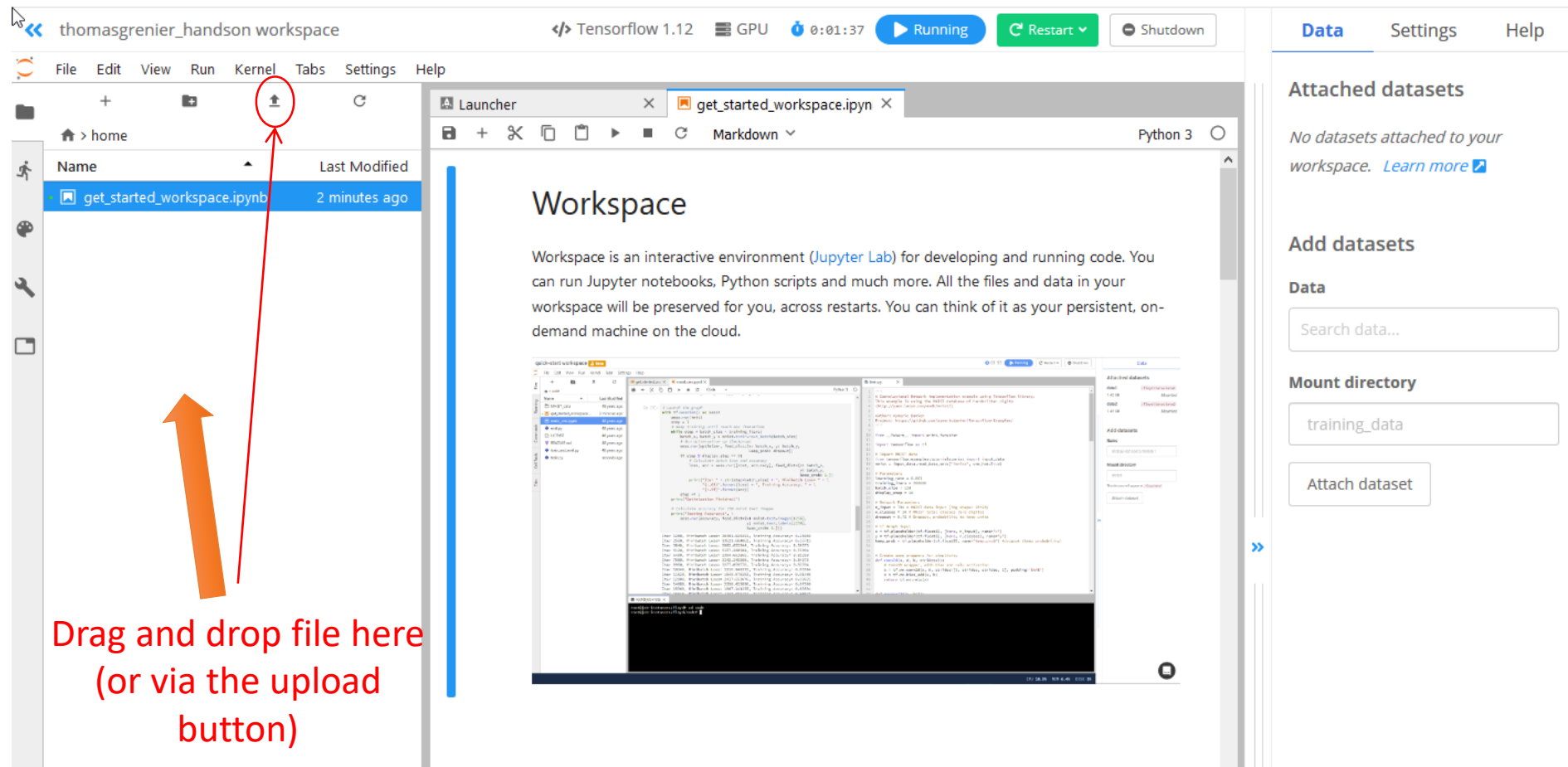


2- Download the zip file of the source

https://gitlab.in2p3.fr/thomas.grenier/tp4ss_segmentation/-/blob/master/TP1.zip

3- Drag and drop TP1.zip file in
your workspace

3- Drag and drop TP1.zip file in your workspace



The screenshot shows the JupyterLab interface for a workspace named 'thomasgrenier_handson workspace'. The top bar indicates 'Tensorflow 1.12' is running on a GPU. The main area displays a file browser on the left with a table of files:

Name	Last Modified
get_started_workspace.ipynb	2 minutes ago

A red circle highlights the upload icon (a square with an upward arrow) in the file browser's toolbar. A red arrow points from this icon to the text below. An orange arrow points from the text below to the file browser area.

**Drag and drop file here
(or via the upload
button)**

The central workspace area shows a notebook titled 'get_started_workspace.ipynb' with the following text:

Workspace

Workspace is an interactive environment ([Jupyter Lab](#)) for developing and running code. You can run Jupyter notebooks, Python scripts and much more. All the files and data in your workspace will be preserved for you, across restarts. You can think of it as your persistent, on-demand machine on the cloud.

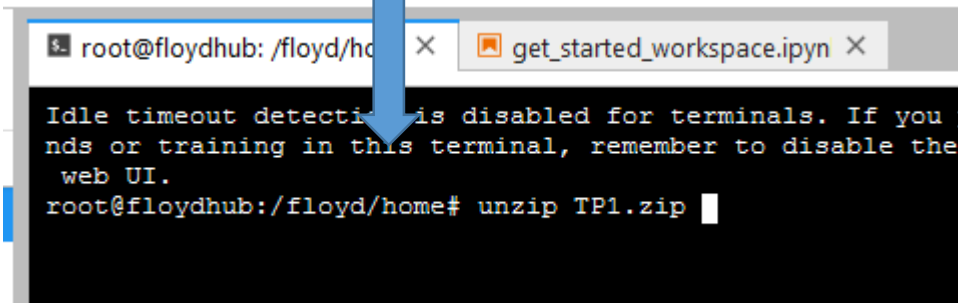
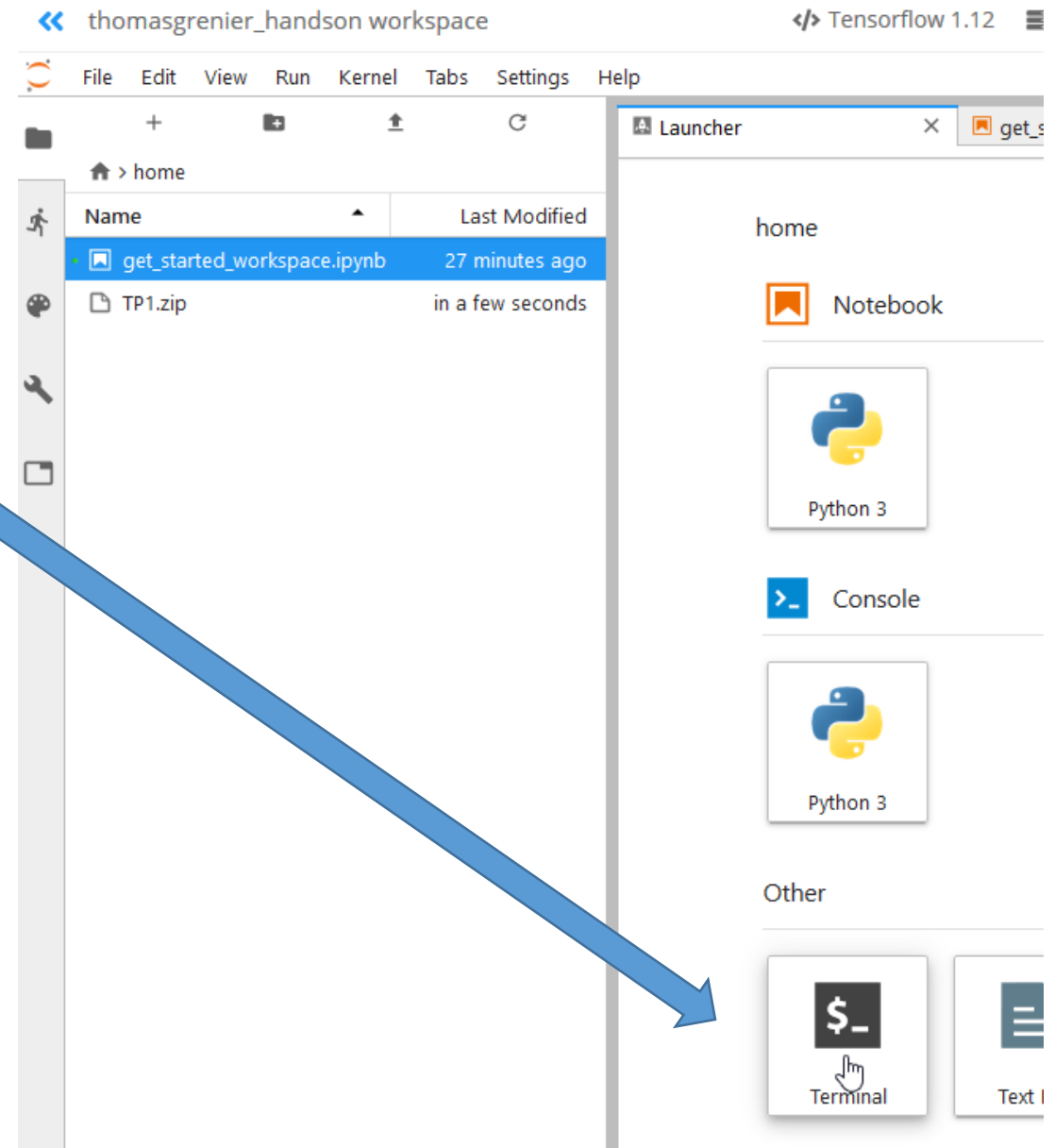
The right sidebar contains the following sections:

- Attached datasets**: No datasets attached to your workspace. [Learn more](#)
- Add datasets**: Search data... (input field)
- Mount directory**: training_data (input field)
- Attach dataset** (button)

4- Unzip the file in /floyd/home

- Here, we unzip the file TP1.zip that was drag-dropped/uploaded

- Select launcher tab
- Select “Terminal”
- Then, enter “unzip TP1.zip”
- **Done !**



5- Double clic on

01_UNET_TF2_test.ipynb

And follow instructions of the notebook

6- (after) Double clic on
02_UNET_TF2_train.ipynb

And follow instructions of the notebook