Getting Started

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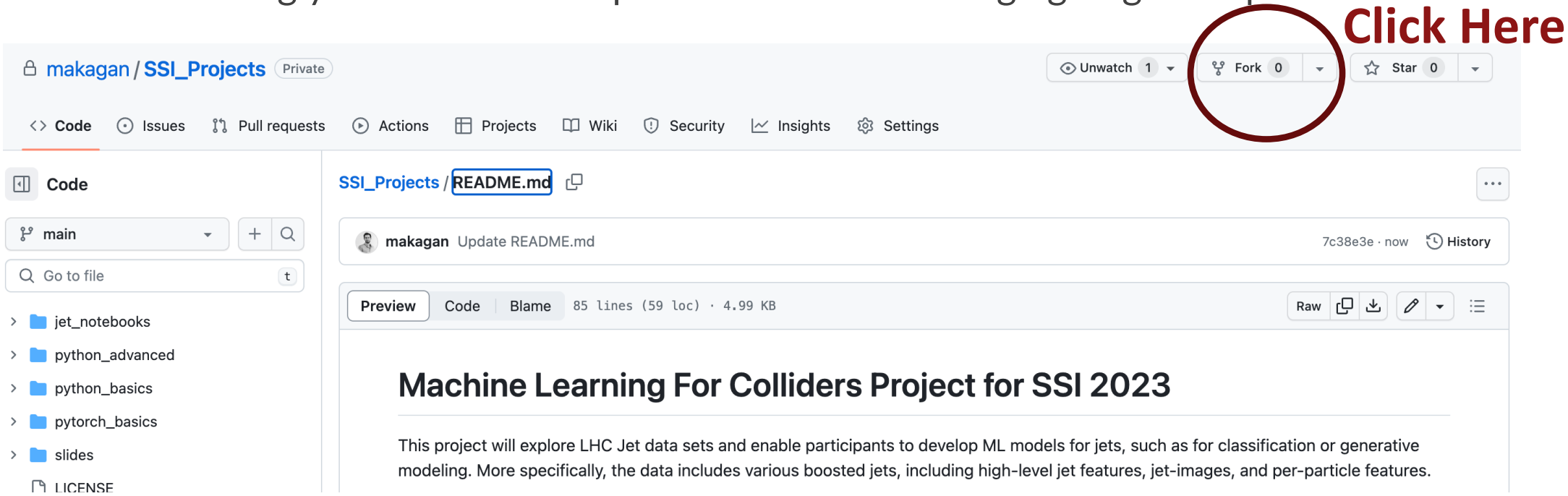
Github

Github Basics

We will use Github for accessing the project code. For a full tutorial, see here

To get started:

1. Create Github account: https://github.com/
2. Got to the project repository and fork it
   - A fork is a copy of the repository (repo) in your own account, allowing you to edit and experiment without changing original repo.



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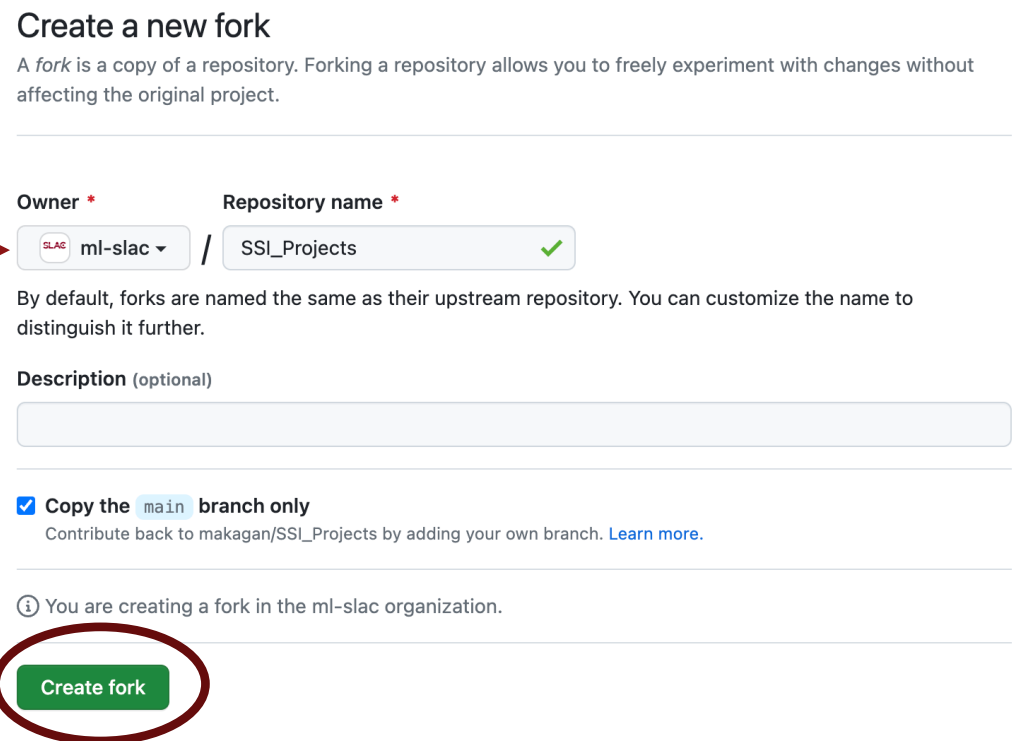
Must be your username



Click Here

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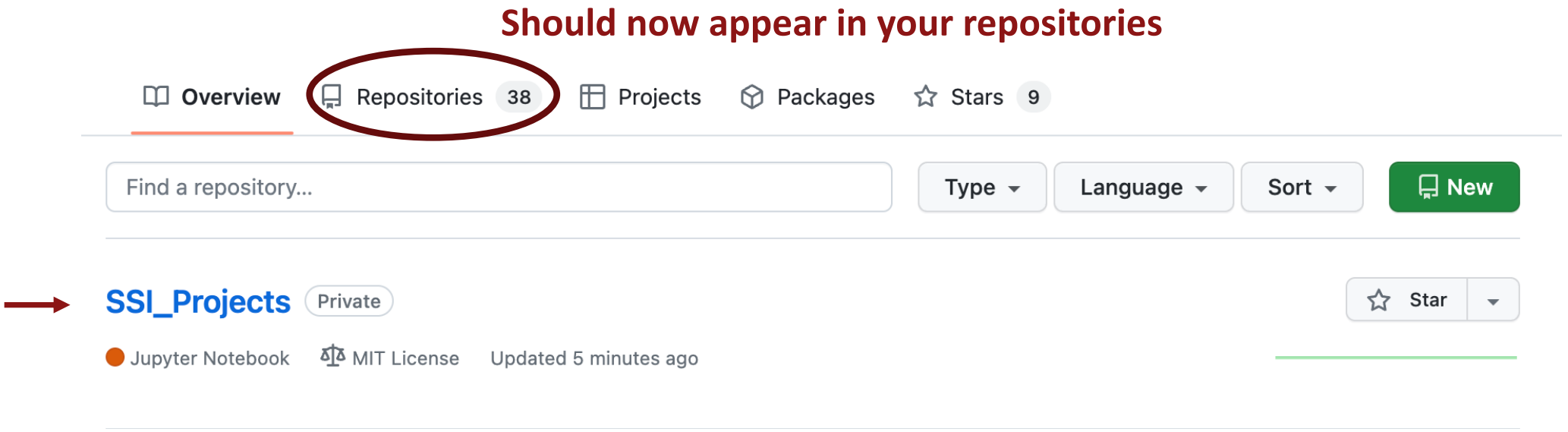


Github Commands I

Before and throughout the course there will be changes to the original course repository and **you will need to keep your own fork of the repo up-to-date**

You first need to install git on your computer (if it's not already installed) following these instructions

Open a terminal, go to your preferred folder, and type the commands:

```
git clone https://github.com/your-username/SSI_Projects.git
cd SSI_Projects
git remote add course https://github.com/makagan/SSI_Projects.git
git fetch course
git merge course/main
git push
```

Github Commands II

After the git merge command you will see a list of files that got changed in your local folder with respect to your remote (on github) repository

The last git push command just pushes these changes to your remote repository

At this point your local folder together with your remote repository should be fully synch with the original repository

Github Commands III

Whenever you change or add a new file in your local `SSI_Projects` folder and you want to save these local changes to your remote github repository (highly recommended) you go again to the terminal and type:

```
cd SSI_Projects
git status
git add fileX folderX ...
git commit -m "whatever message explaining changes"
git push origin main
```

With the git status command you can see the list of changes — be sure you add them all to the commit when using git add

Keep in mind that your local/remote changes will merge with the changes in the original course repo when following the steps in previous slide 4 — this might raise conflicts and/ or out-of-synch issues

Google Colab

Setup

We will be using **Colab** to run the hands-on part

- **Colab** is a free platform developed by Google to execute code on the cloud: **you will need a google account**

The peoject materials are served with Python notebooks through **jupyter**

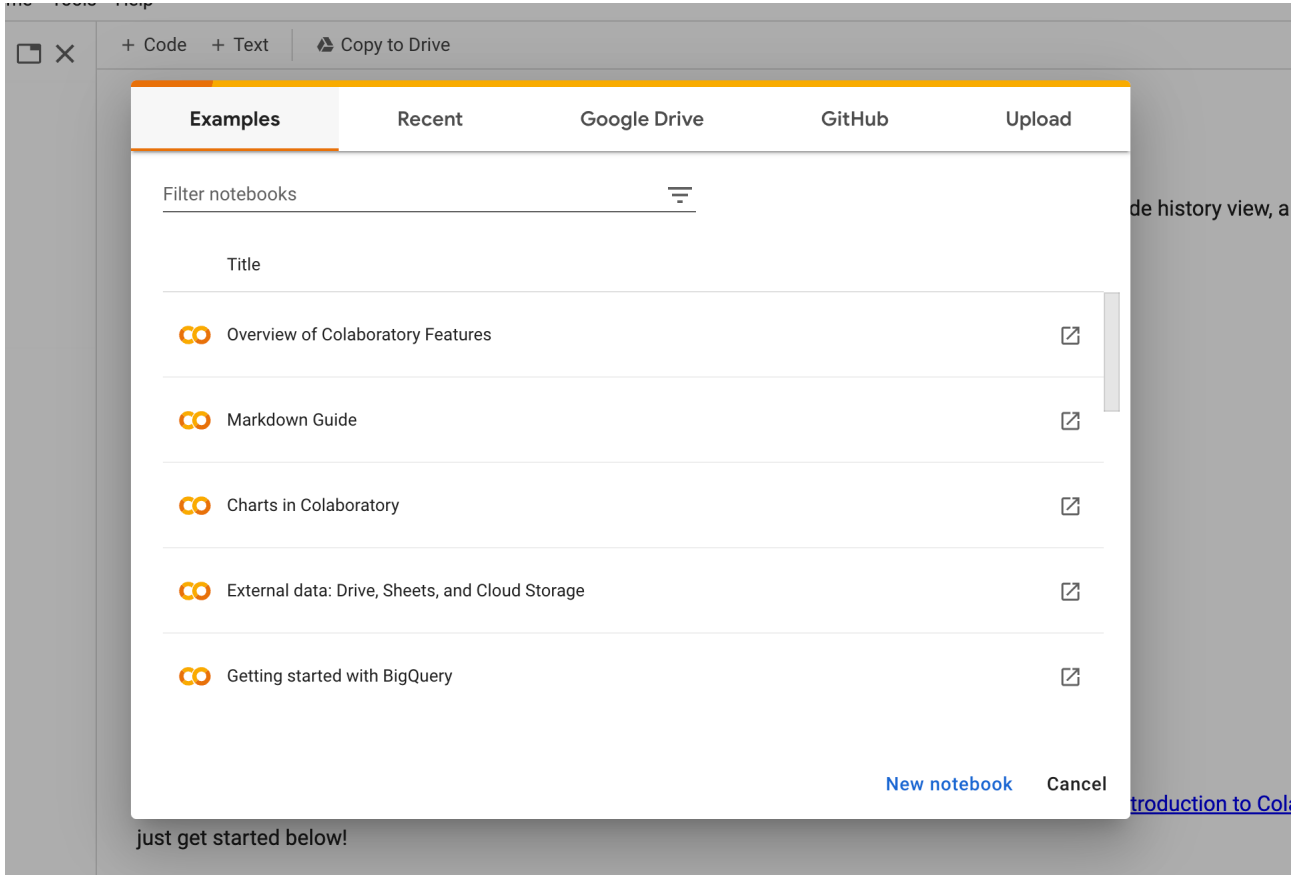
If you're new to jupyter notebooks, select a cell and hit "shift + enter" to execute the code

For a full jupyter tutorial see here

Step 1

Make sure you have a Google account

Go to: https://colab.research.google.com/



Step 2: Import from Github

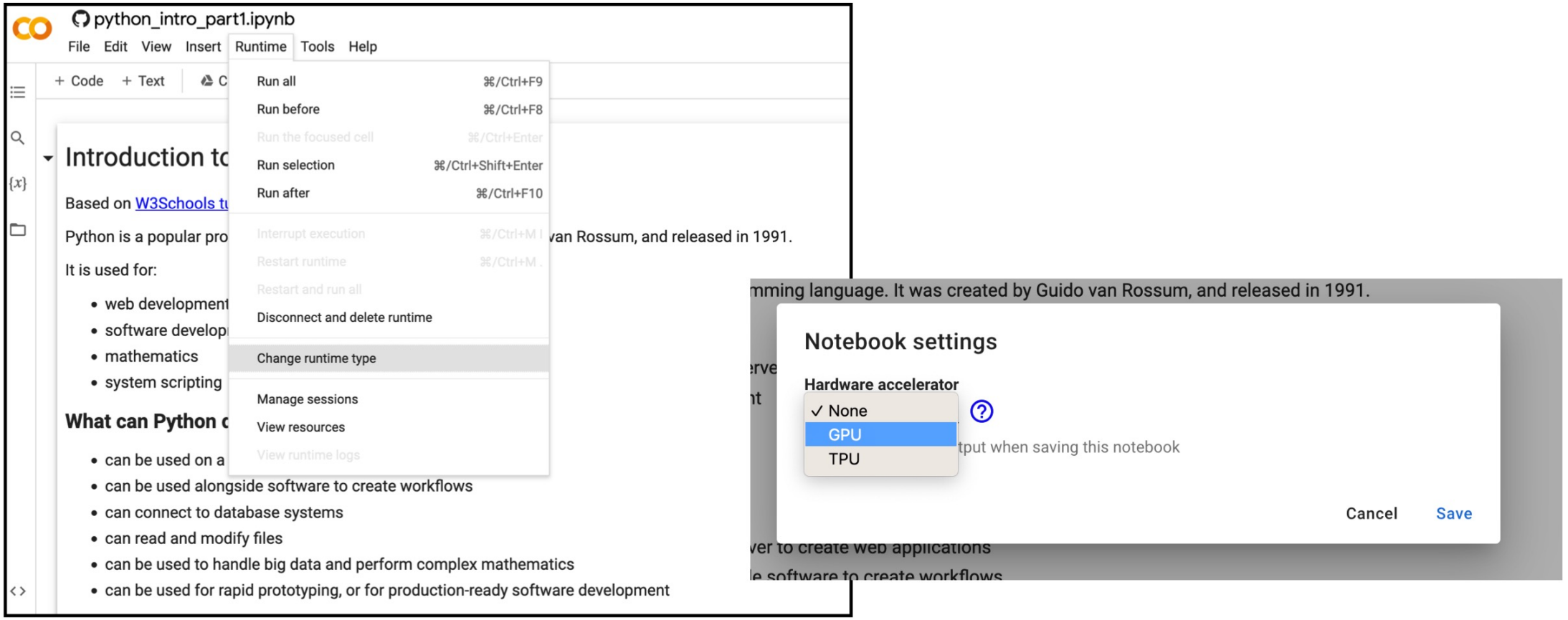
Click on the `GitHub` tab

Specify the repo: `makagan/TRISEP_Tutorial`

- NOTE: you can specify your own fork of the repo, so you can save changes

Click on one of the `.ipynb` notebooks

Step 3: Use GPU



Prerequisites

Intro to Python Notebooks

We will use python for the projects

If you are not familiar with it you must go through some of the basics functionalities by running these two notebooks in Colab (see previous slides) before the course:

- `python_basics/python_intro_part1.ipynb`
- `python_basics/python_intro_part2.ipynb`

The notebooks also contain a few optional simple exercises to help you getting more familiar with it (let me know if you have issues)