

# BIOS-584 Python Programming (Non-Bios Student)

Week 01 – Install PyCharm

Instructor: Tianwen Ma, Ph.D.

Department of Biostatistics and Bioinformatics,  
Rollins School of Public Health,  
Emory University

# Tutorial on PyCharm Installation

# Step 1: Choose Your Version

- Go to the official JetBrains PyCharm website
- Choose the educational version
- <https://www.jetbrains.com/edu-products/download/?section=pycharm-edu>
- PyCharm will ask you to verify with your Emory email address when you first launch it.

# Step 2: Download the Installer

- The website will automatically select based on your current system:
  - MacOS
  - Windows
  - Linux

# Step 3: Install PyCharm


- For windows:
  - Run the .exe file
  - Follow the setup wizard
    - Installation location
    - Create desktop shortcut (Optional)
    - Update PATH and file associations (Optional)
- For MacOS:
  - Open the .dmg file
  - Drag PyCharm to the Applications folder
  - Open from Applications or Launchpad
  - MacOS may ask for permission to open – click Open.

# Step 3: Install PyCharm

- For Linux:

1. Extract the `.tar.gz` file:

```
bash
```

 Copy  Edit

```
tar -xzf pycharm-community-*.tar.gz
```

2. Navigate into the extracted folder:

```
bash
```

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```
cd pycharm-community-*/bin
```

3. Launch PyCharm:

```
bash
```

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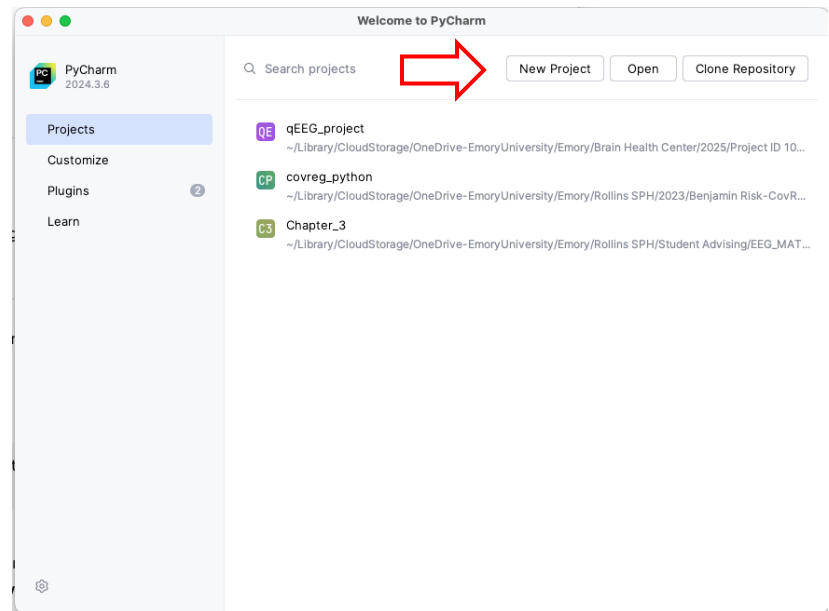
```
./pycharm.sh
```

# Step 4: Initial Setup

- Upon first launch:
- Accept license agreement
  - Create a JetBrains Account using Emory email address
  - <https://www.jetbrains.com/academy/student-pack/#students>
- Choose UI theme (light/dark)
- Customize plugins (optional)

# Step 5: Start a Project

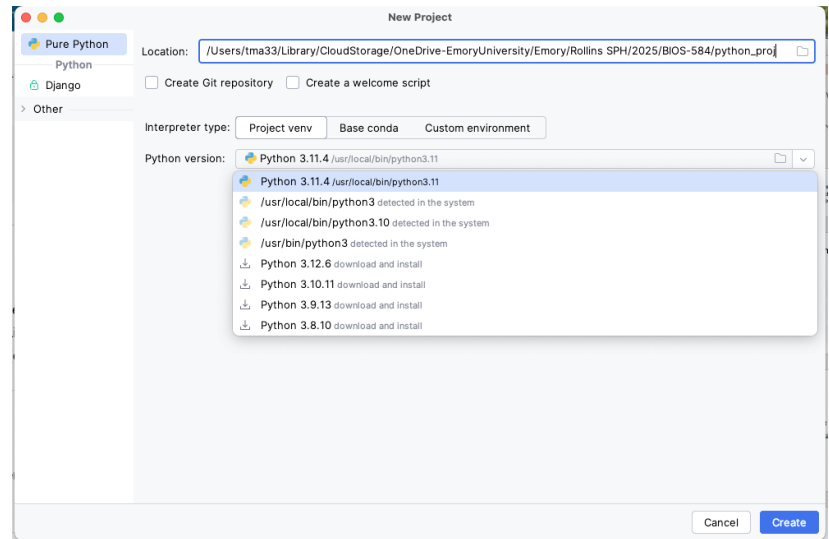
- Click the PyCharm icon
- Click “New Project”





# Step 5: Start a Project

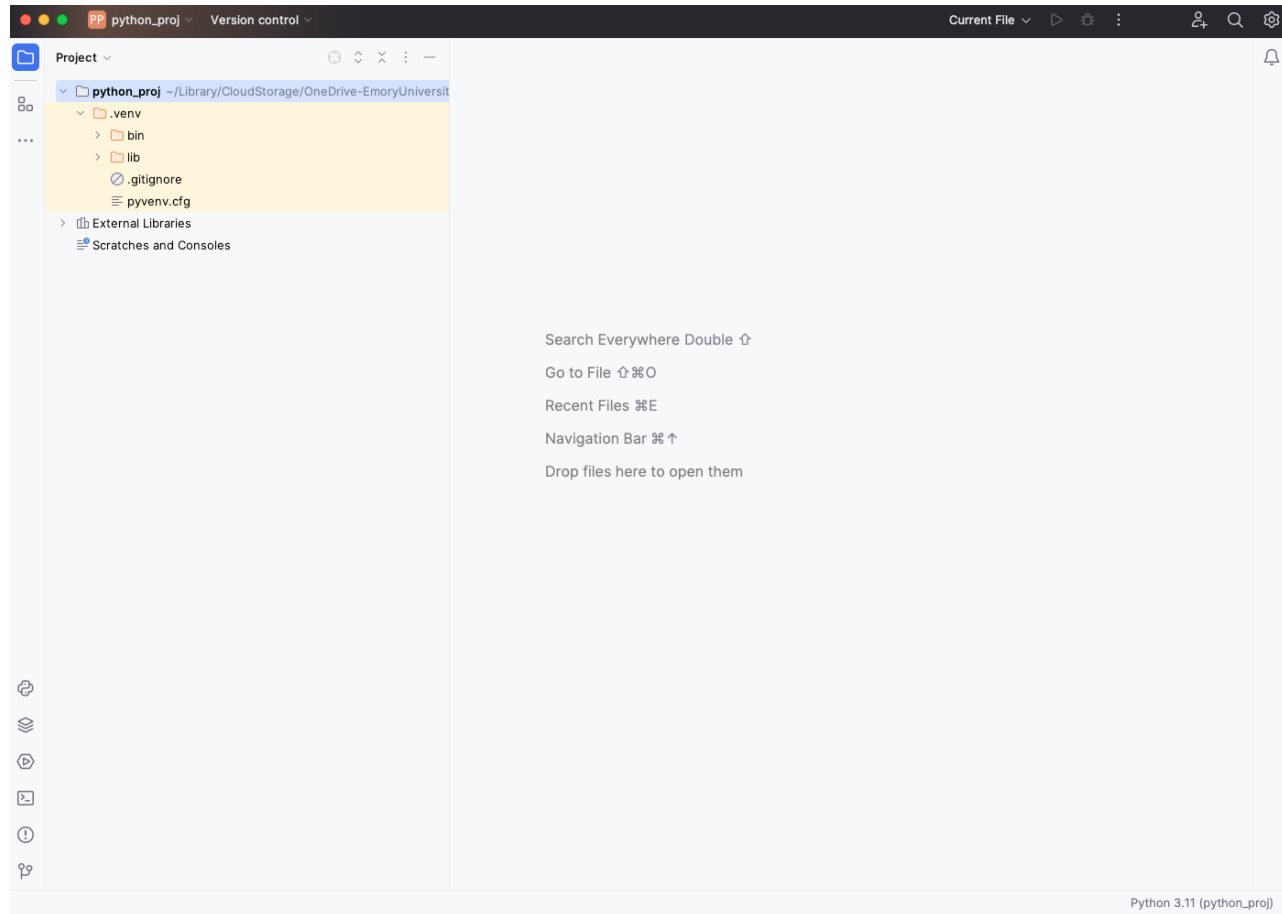
- Determine your parent directory location
  - Make sure it is an empty folder
- Select your python interpreter
  - You can download different versions.
- PyCharm automatically creates a virtual environment called `.venv`.



# Step 5: Start a Project

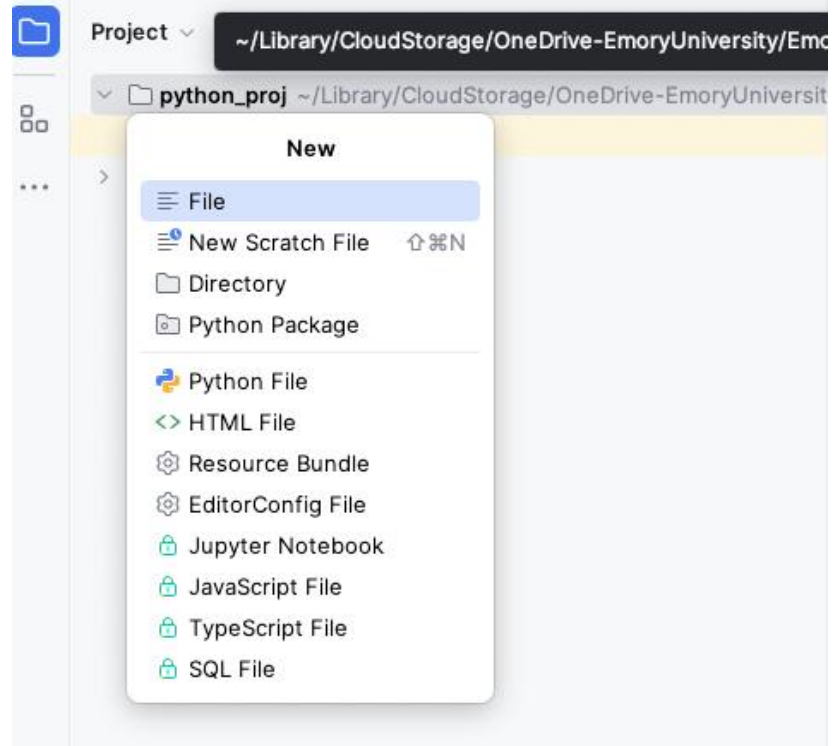
- You can create your Python project folder under the GitHub folder to save time for push and fetch later.
- For Mac users, the default parent directory should be
  - `./Documents/GitHub/XXX`

# Interface upon Initialization




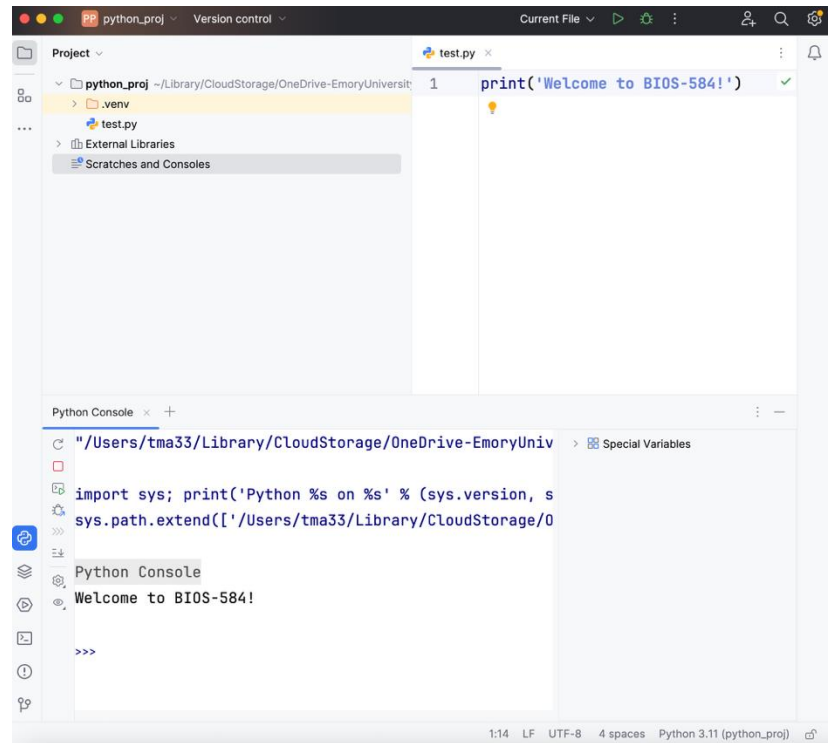
# Step 6: Create new python file

- File -> New... -> Python File for MacOS
- Jupyter Notebook is no longer free directly from PyCharm, we will launch it in a different way.
- Begin coding!



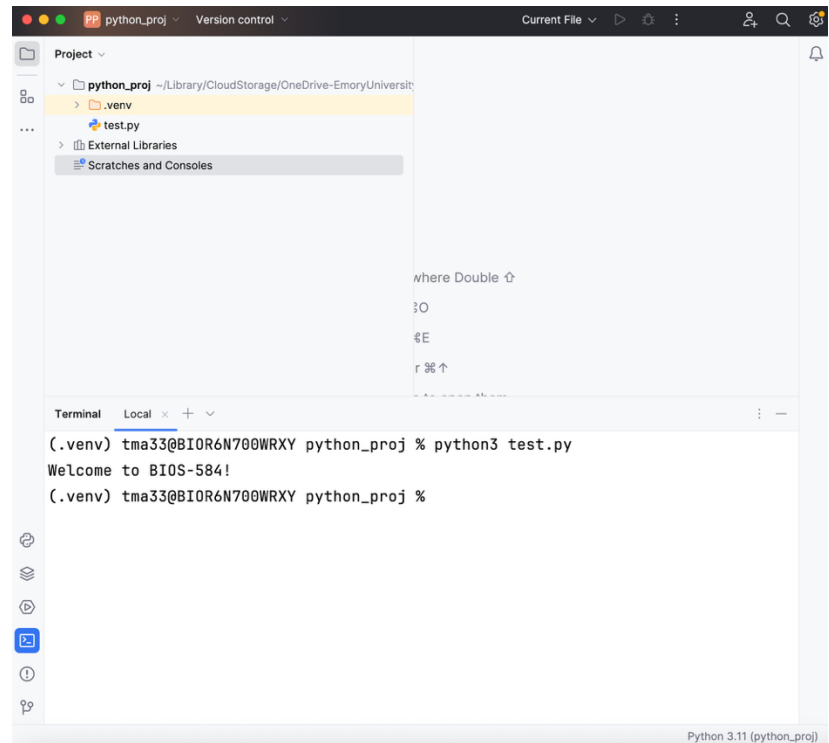
# Step 7: Run Your Python Code

- Via Console:
- Click 
- Shortcuts:
  - MacOS: Ctrl+Shift+E
  - Windows: Shift+F10



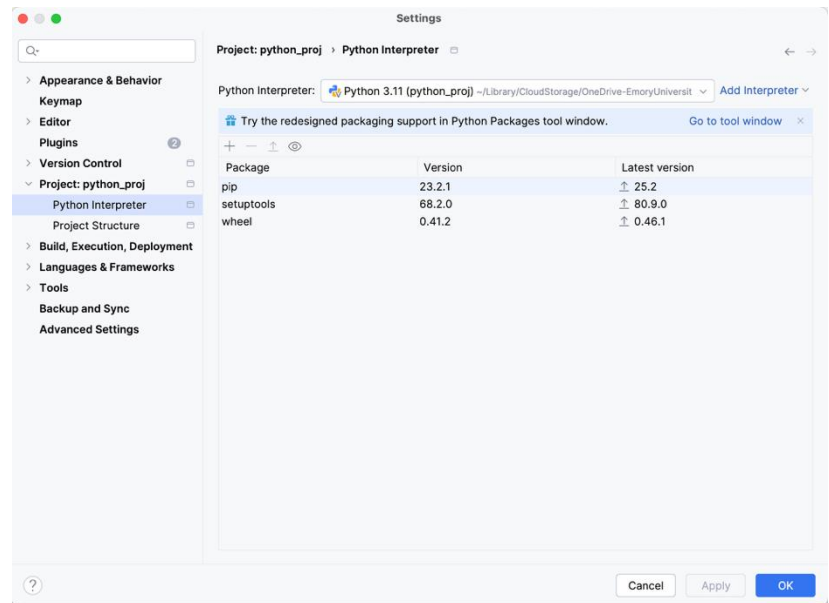
# Step 7: Run Your Python Code

- Via Terminal:
- Open terminal (inside PyCharm):
  - `python test.py`
  - `python3 test.py`
  - Make sure you see `(.venv)`



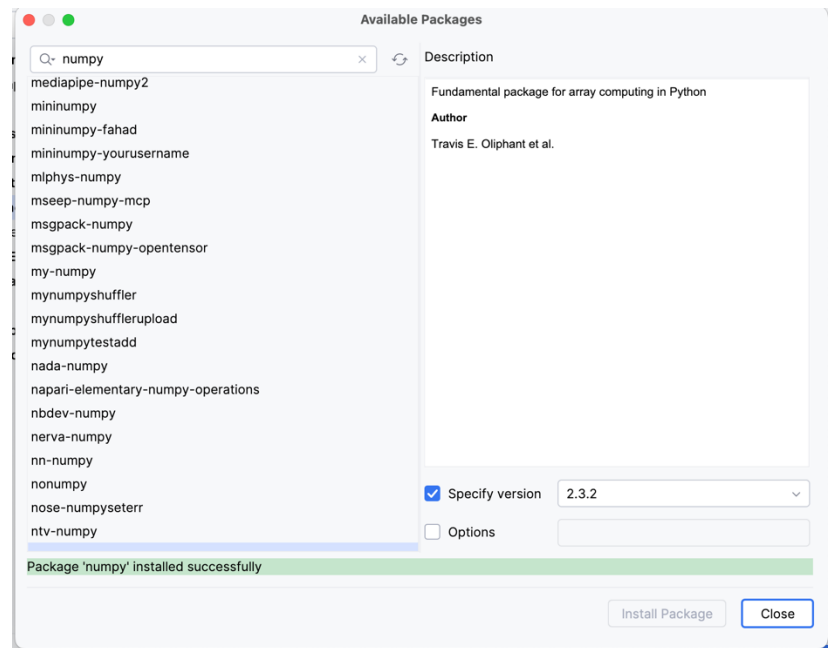
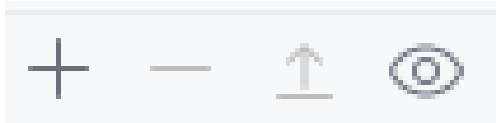
# Step 8: Install Python Packages

- PyCharm -> Settings -> Python Interpreter
- Click on (+)
- Type your package name and specify version
  - Sometimes the newest version may not be compatible.
  - If so, read the error message and try older version.



# Step 8: Install Python Packages

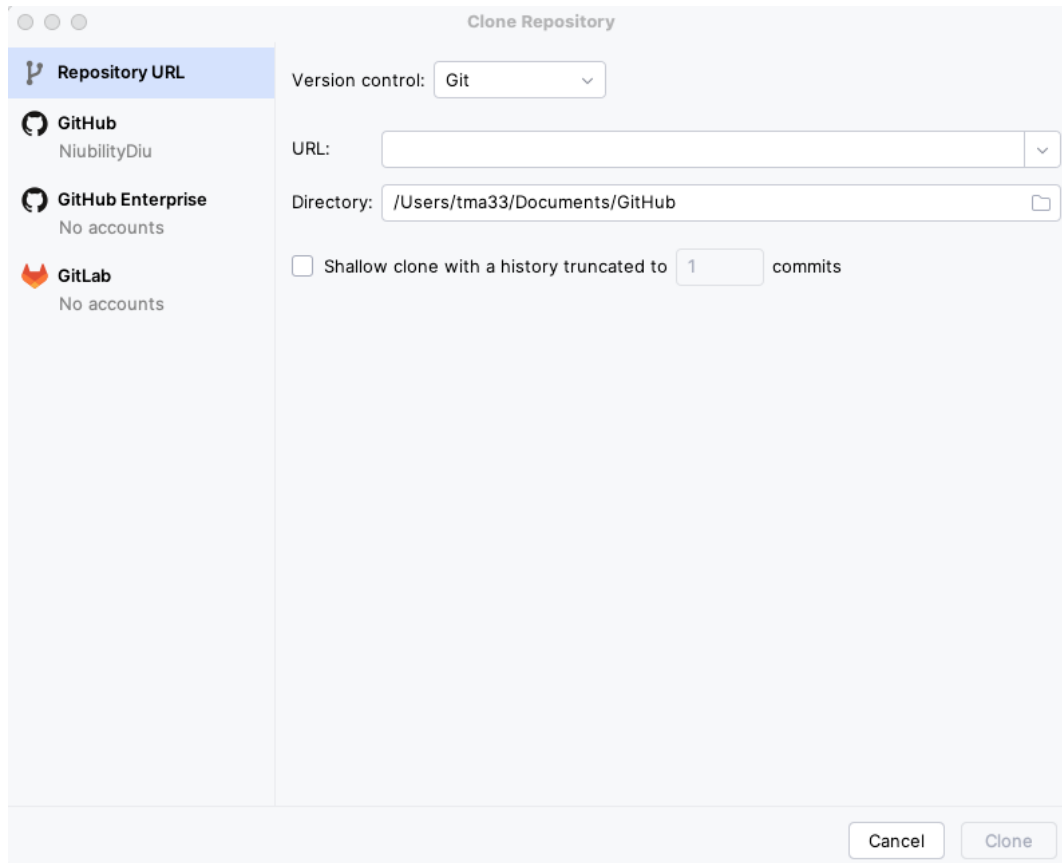
- Click “Install Package”
- A green message pops up if it is installed successfully.
- You can uninstall or upgrade existing packages





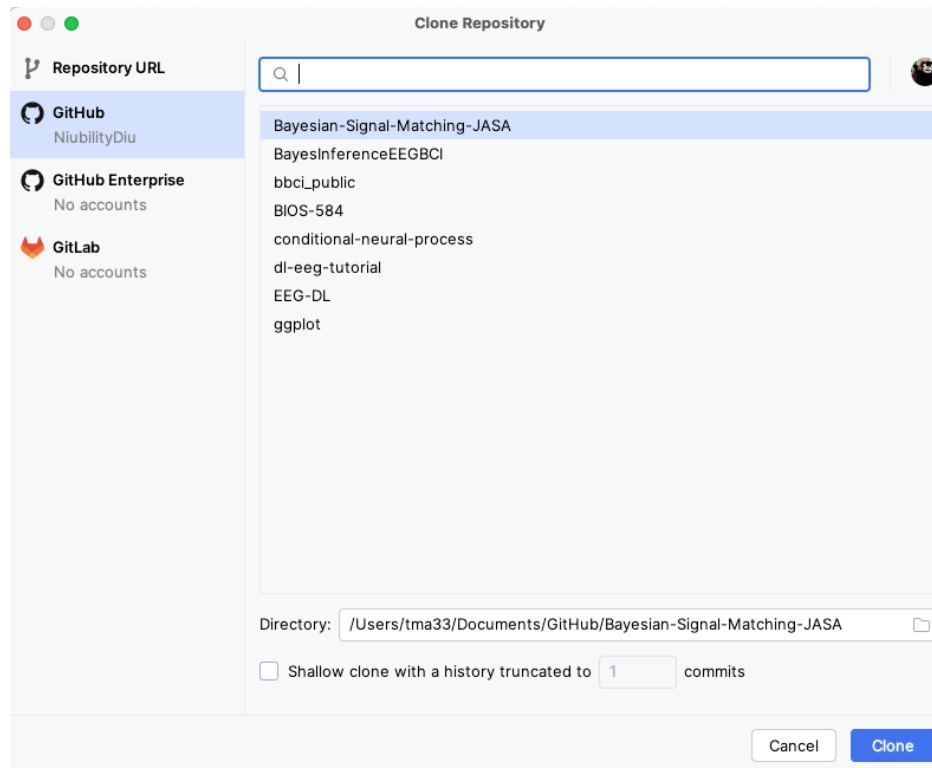
# Connect PyCharm with GitHub

- File -> Project from Version Control



# Connect PyCharm with GitHub

- Type the repository URL
- Sign in your GitHub Account



# Connect PyCharm with GitHub

- Click “Clone”
- You can download your repo and open it with PyCharm directly

# Questions?