

ICM CARES – TRAINING: GIT Course

Participants: -

Duration: 6 hours (3 sessions)

Motivation:

Do the names “myProj_v0”, “myProj_v0_new”, “myProj_v0_new_old”, “myProj_v0_new_old_Gerard” ring a bell? Are you afraid of making changes to your code? Do you lose track of the changes made to the code? Then come to the course about GIT methodology!

Goals:

Learn the GIT methodology and integrate it into your workflow. Do not be afraid to change and break code. Share your work and work collaboratively. Integrate the methodology into your IDE (R studio, VS Code). Come out of the sessions with everything setup.

Contents:

First session

- Level 1: create a user and a repository
- Level 2: clone a repository
- Level 3: create SSH keys
- Level 4: use your SSH keys to authorize your computer
- Level 5: make a change to a file (git status, git add, git commit, git diff)
- Level 6: Update the repository in the cloud (git push)
- Level 7: Ignore files and folders (.gitignore)
- Level 8: Update your local repository (git pull)

Second session

- Level 9: Create a conflict (two users modified the same code)
- Level 10: Solve a conflict
- Level 11: Undo a change in your local version (git checkout, git reset)
- Level 12: Go back to a previous version (git checkout)

Third session

- Workflow with your projects
- Folder organization
- Level 13: Create a new branch (git branch)
- Level 14: Make new changes in the branch
- Level 15: Integrate the new branch into main (pull request, git merge)

Methodology:

This is a practical workshop: we will introduce the concepts as we work with them. The workshop is organized in levels, which you should pass to move on. The workshop offers solutions for different IDEs, such as R studio, VS Code or the terminal. We will offer technical support during the workshop for the in-site participants. When possible, we will offer support to the online participants.

We will offer support in Catalan, Spanish and English.

Means:

- Slides:
<https://docs.google.com/presentation/d/1E2iUGJCaSYEanzDq8GqjmfFBlooCrdR6JJsLCp0iG0I>

Not included in this workshop (but possible upon request):

- Github projects: organize your project with milestones, gantt diagrams, status boards, etc., and relate it to your commits and pull requests
- Github pages: create a website for your project, publish your plots automatically, github markup language.