

Recherche Reproductible:

Applying VCSs and CI to research

by Guille Polito
@GuillePolito





Who am I

- **2008-2012:**
 - Software Engineer in the private sector
 - Teaching programming
- **2012-2016:** PhD and PostDoc in Software Engineering applied to programming languages
- **2016-now:** Research Engineer CNRS @ CRIStAL

Reproduction vs Replication

- **Replication:** a study that takes an **existing** method/ experiment and applies it to a **new set of data**
- **Reproduction:** the act of repeat an **existing** method/ experiment on the **original set of data** (usually to verify we have the same results)

What this course is about: reproduction

- Learn some tools/techniques that help with the reproduction of your studies
 - Techniques originated in Software Engineering (SE)
 - But nevertheless applicable to non-SE
 - E.g., VCS such as Git, CI such as TravisCI

What this course is **not** about: git hacking

- We are not going to learn all git commands
- We are going to avoid some of them on purpose (stash, rebase)
- But the course will prepare you to understand easily what they do

3 Modules

- 27/06 - Module 1: Git basics
Getting started, basic commands, good practices
- 04/07 - Module 2: Git advanced
Git as a Graph, branching and merging
- 11/07 - Module 3: Git and CI for reproduction
Git workflows, CI 101, perspectives of CI