

Reproducibility in Scientific Research

We're doing it wrong

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What are we talking about?

(According to ACM)

- Repeatability: same team, same setting
- Reproducibility: different team, same setting
- Replicability: different team, different setting

What reproducibility can do for the others

- Colleagues/students
- Reviewers
- The research community
- The world!

What reproducibility can do for you

- Better control over your workflow
- Higher confidence in your results
- Quicker prototyping
- Reproducible research gains more attention
- Think of yourself in five years' time as *a different person*

Tricks of the trade

- Git: Commit *before* experiments and tag the results
- Build a "script cascade" (using configuration files)
 - One "root" `run.sh` script
 - Several child scripts (`figure1.sh` , `exp1.sh` , ...)
- Provide a container image (please!)
- TELL ME YOUR RANDOM SEED(s)
- And infinitely many others
 - `pip` / `conda` / `maven`
 - notebooks
 - Automatic LaTeX report generation

Conclusions

- *Design* your workflow to be reproducible
- Don't be lazy
- YOU FORGOT THE RANDOM SEEDS

One more thing...

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Code

marcoesposito_di re-add all builds

fc93a0f 2 minutes ago

6 commits

builds	re-add all builds	2 minutes ago
figures	slides stub. First README commit	41 minutes ago
LICENSE	Initial commit	19 hours ago
README.md	stable slides version	8 minutes ago
compile_linux.sh	fix input bug in compile_linux.sh	35 minutes ago
pitchme.md	stable slides version	8 minutes ago

README.md



A reproducible slide presentation about reproducibility

This repository host the source code for the slides used for a talk about reproducibility in scientific research within the 2021 DiDo Workshop held in Bertinoro, Italy.

The slides use [Marp](#), a Markdown presentation ecosystem.

The goal of all this is to make it possible and easy to reconstruct the workflow for building the slides.

Additionally, you can use this repository as a boilerplate for building slide presentations using Marp.

Building the presentation

About



A reproducible slide presentation about reproducibility

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Languages



