

# Fast introduction to Git

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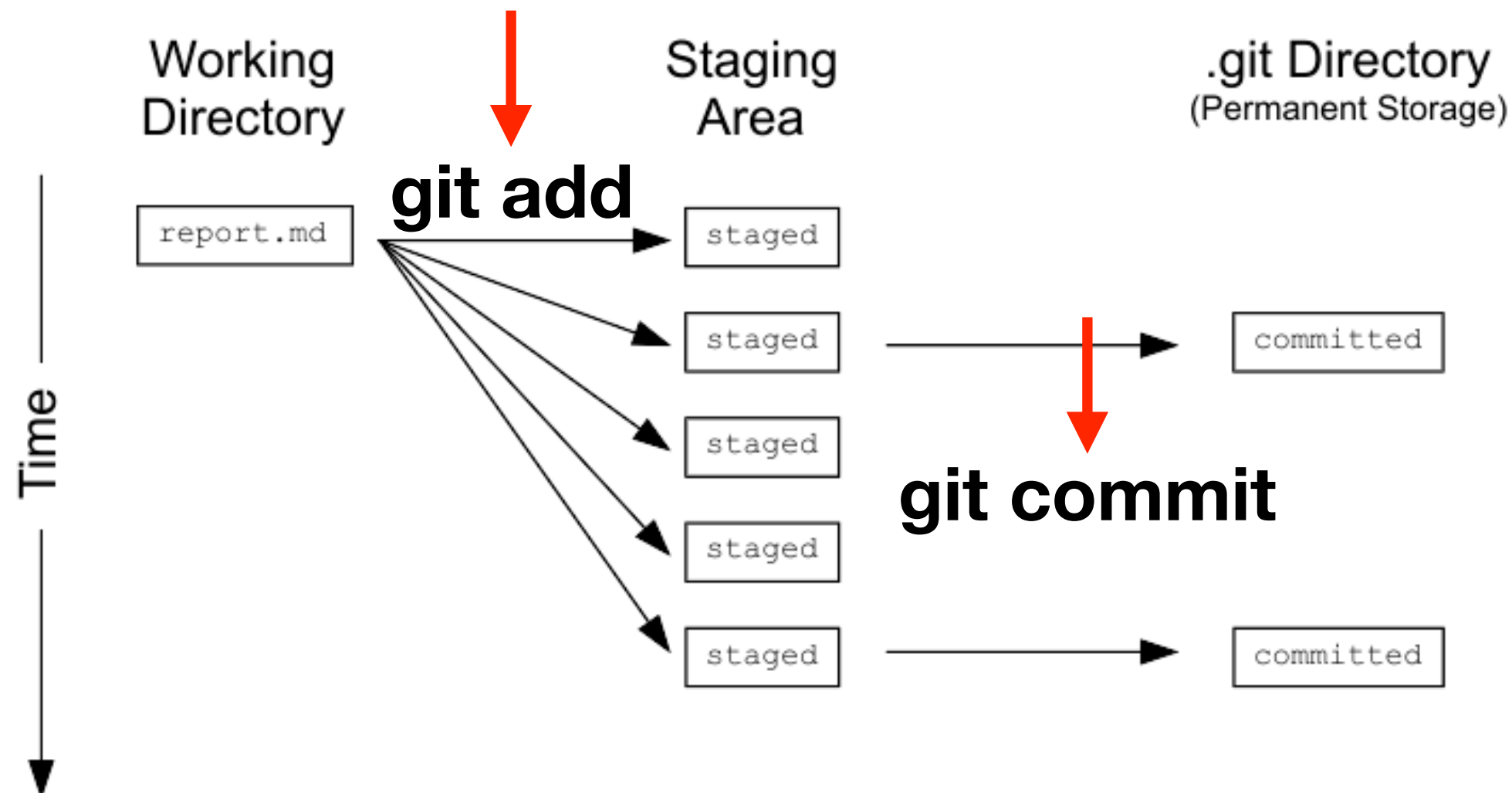
# What is version control?

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- A version control system is a tool that manages changes made to the files and directories in a project.

# Basic commands

→ **git init name-repository**  
**git init path/existingFolder/**



# git add

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- `git add FileName.txt`
- `git add ./path/to/FileName.txt`
- `git reset HEAD`

# git commit

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- `git commit -m "Program appears to have become self-aware."`
- `git commit --amend -m "Program is self aware and became hostile"`
- `git commit`

# git log

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- git log

```
commit 6a98033803436d8f264608575ab44e06953cfb7b (HEAD -> ConI_BiweightMidCorrelations, master)
Author: ManuelMK <nolozz@gmail.com>
Date:   Fri Oct 16 10:52:20 2020 +0200
```

I did some changes to the functions. As of now I will keep better track of the changes

```
commit c3c22dcad0d86b8880efca9cbc1d1f9de3628776
Author: ManuelMK <nolozz@gmail.com>
Date:   Fri Jul 17 11:39:59 2020 +0200
```

I added a progress bar. Changed the name of one function (tableLRDFs\_LFs) using Driver and Linked Features. Changed the split option, but still needs to be tested.

```
commit 2a867f25e16ce454fa03fa254d60fdc23d146a2e
Author: ManuelMK <nolozz@gmail.com>
Date:   Tue Jul 14 14:40:34 2020 +0200
```

Expanded to include new Steiger Approaches

# git status

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- git status

# git checkout/ git reset

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- `git checkout -- filename` (for unstaged files, changes are gone forever)
- `git checkout 5be6 data/File.txt`
- `git checkout HEAD -- Directory`
- `git reset HEAD path/to/Skynet.txt` (for staged files, resets to last version)
- `git reset Directory` (unstage everything of directory)



# git branch

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- `git branch NewNameBranch`
- `git checkout NewNameBranch`
- `git checkout -b NewNameBranch`
- `git merge source destination`

# git diff

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- `git diff File.txt`
- `git diff BranchA..BranchB`

# How can I create a copy of an existing repository?

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- `git clone URL`
- `git clone /existing/Project`
- `git clone /existing/Project NewProjectName`
- `git remote (track origin)`
- `git pull remote-name branch-name (git pull origin master)`
- `git push remote-name branch-name`