Version control

[GitHub]

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What is GitHub?

- GitHub is a web-based Git repository hosting service (Wikipedia).
- Directed to hosts open source projects
- Social network functionality (fork/clone projects)
- Other main competitor: Bitbucket

Why publish on GitHub?

- You can easily share everything that is related to your paper
  - Text
  - Code
  - Figures/Tables
- Could serve as supplementary repository to articles
- Cooperate with others using Git and GitHub
- Timestamp your work
- Github can host static webpages (in combination with, e.g., Jekyll)
  - In fact, all these workshop materials and this website is just one repository on GitHub ERSA-WooW

How to publish on GitHub?

- You **pull** material from GitHub and you **push** material to Github
- Typical workflow:
  1. *Pull* changes from Github
  2. Work
  3. Commit your changes to your *local* repository
  4. Work
  5. Commit your changes to your *local* repository
  6. etc.
  7. Push all changes to Github
     - Possibly solve conflicts when cooperating

With GitHub Desktop push/pull is replace by sync (initial one is publish)

Assingment 1:

1. Open ERSA-WooW in `GitHub` desktop
2. Commit changes of your Markdown paper to `GitHub` desktop
3. Sync your Markdown paper to your `GitHub` account

Assignment 2:

1. Create new project folder `MyPaper`
2. Copy the `html` result of the `Markdown` assignment in `MyPaper`
3. Rename `Assingment1.html` in `index.html`
4. Initialise a `Git` repository in `Github` desktop (with `Create`)
5. Add and commit your paper
6. Create a new branch called `gh-pages`
7. And publish all to `Github`
8. Look at the website
   `http://_YourGitHubname_.github.io/MyPaper`

In conclusion

- Markdown is easy to learn and incredibly useful
  - blogs/website
  - to-do lists
  - slides
  - papers
- Versioning is **very** important but often forgotten
- Open repositories are becoming incredibly useful (if not only to provide background material to your papers)
- Do not be afraid to open up your research
  - large benefits for the scientific community at large
  - large benefits for the individual researcher