

# Developing with GitHub

Haiwang Yu (NMSU)



# Check list to get started

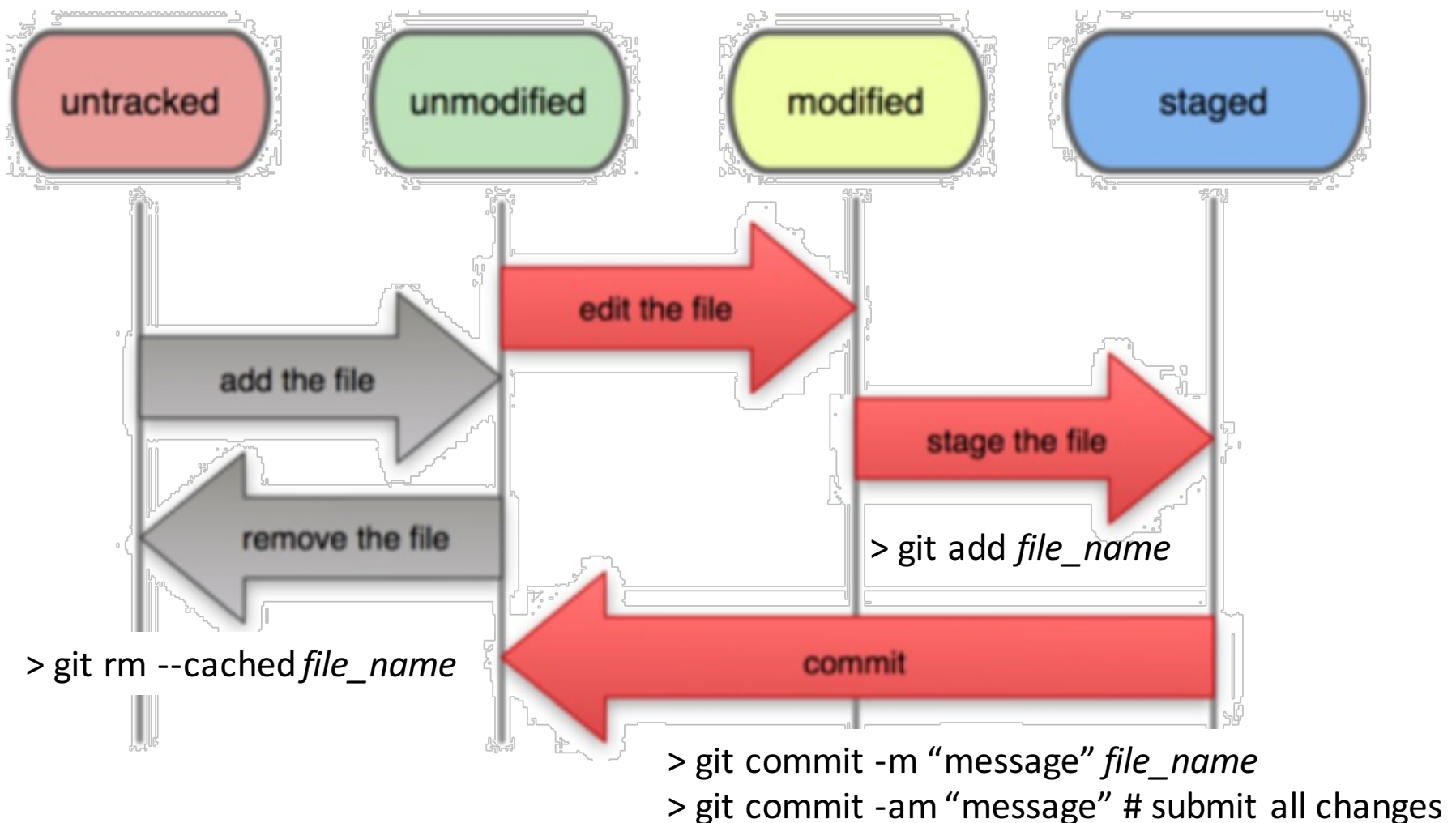
1. Register at <https://github.com/>
2. Send me yuhw.pku@gmail.com your user account name
3. Send your RCF SSH public key to GitHub:  
<https://help.github.com/articles/generating-ssh-keys/#step-4-add-your-ssh-key-to-your-account>
4. Try it out: <https://github.com/E1039-Collaboration/e1039-wiki/wiki/Start-up-guide-with-an-example>

# Collaborative editing on GitHub

- GitHub support two types of collaborative editing, we would use both for different repositories
- For the analysis repository, see “[Example work flow 2](#)”
  - Every collaborator we free to add and edit
  - Example result: <https://github.com/E1039-Collaboration/seaquest-analysis/commit/1cfe01d450d983e4b236907749ccb5a2635d1316>
- For nightly-built software (e.g. coresoftware repositories)  
See “[Example work flow 3](#)”
  - Collaborators can fork the repository -> make modification -> send a pull request.
  - Examples results: <https://github.com/E1039-Collaboration/seaquest-offline/pull/3>
  - Similar flow to CMS software management (<https://github.com/cms-sw/cmssw>)

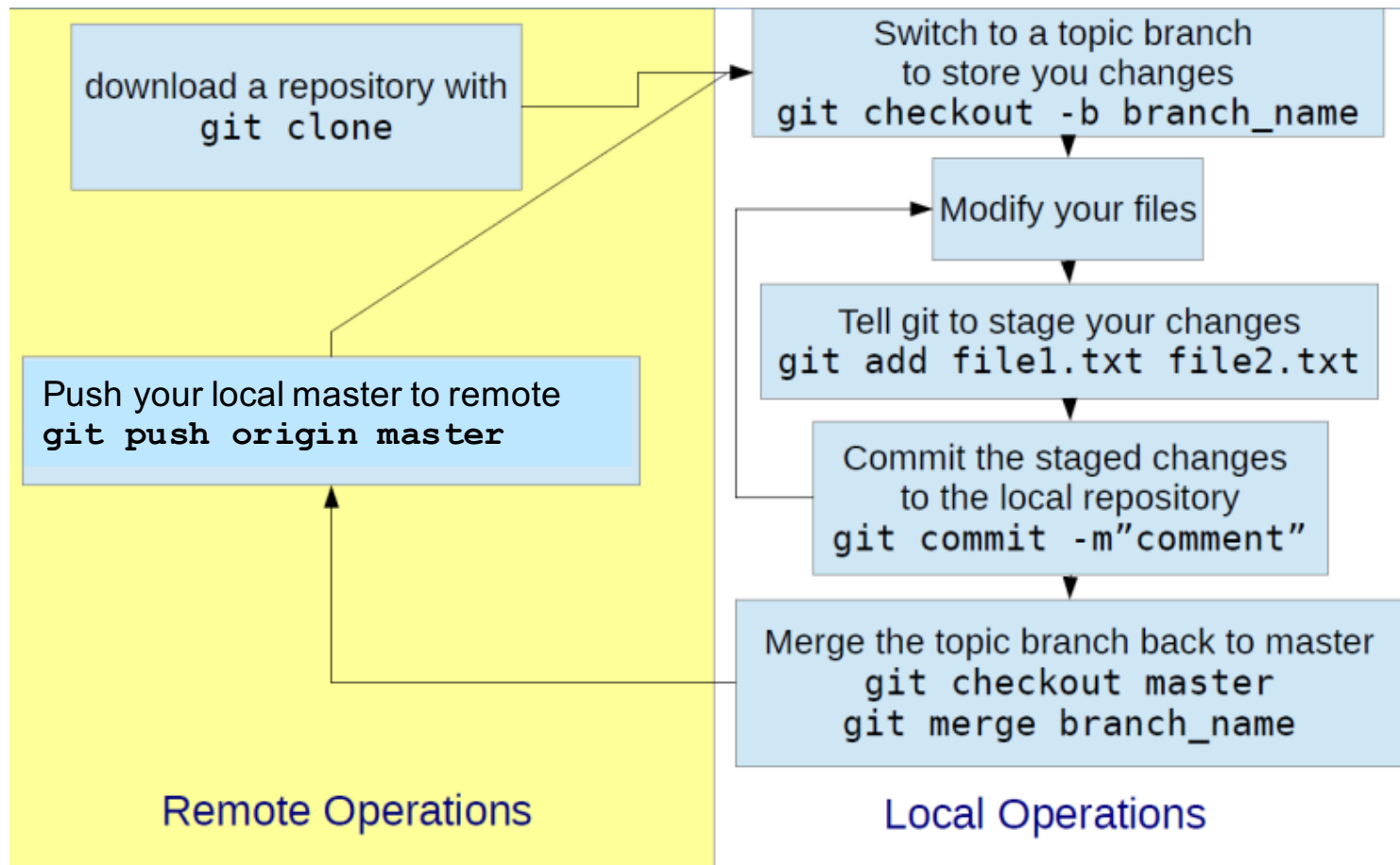
# Example work flow 1, local file operation

Read More: <https://git-scm.com/docs/gittutorial>



# Example work flow 2, collaborative editing analysis repository

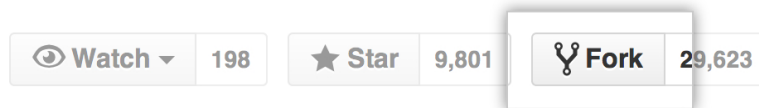
```
> git clone git@github.com:E1039-Collaboration/seaquest-analysis.git  
> cd seaquest-analysis
```



# Example work flow 3, Fork & pull request

## GitHub coresoftware repository 1/2

- Fork the sPHENIX/coresoftware in your GitHub account
  - Login to your GitHub account
  - Go to <https://github.com/sPHENIX-Collaboration/coresoftware>
  - Fork it into your account:

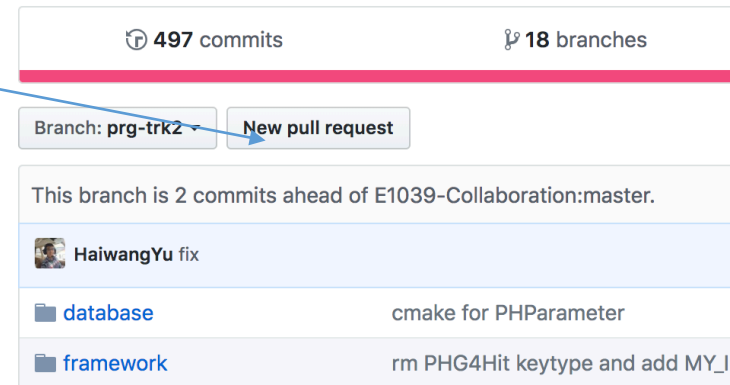


- Setup your fork and sync your fork to sPHENIX
  - `> git clone git@github.com:HaiwangYu/seaquest-offline.git`
  - `> git remote add upstream git@github.com:E1039-Collaboration/seaquest-offline.git`
  - `> git remote -v` # check the setup
  - `> git fetch upstream` # download update from sPHENIX main
  - `> git merge upstream/master` # merge updates to your local
  - `> git push origin master` # upload

# Example work flow 3, Fork & pull request

## GitHub coresoftware repository 2/2

- Make modification and upload changes to your fork
  - `> git push origin master`
- Then submit a pull request to suggest your change to sPHENIX/coresoftware
  - Goto your GitHub account, select your fork of coresoftware
  - Submit a pull request:



- Development team will test, comment and approve the change following the pull request