Advanced Programming for Scientific Computing
Tutor 01: Modules, Git, GitHub

Stefano Zonca

MOX
Dipartimento di Matematica
Politecnico di Milano

A.A. 2014/2015

Modules

List available modules:

```
module avail
```

Load a module:

```
module load <name>
```

```
$mk<name>Home
$mk<name>Inc
$mk<name>Bin
...
```

Unload a module:

```
module unload <name>
```

List loaded modules:

```
module list
```

Git

Git is a distributed revision control system.
http://git-scm.com/

Configure git:

```
git config --list

git config --global user.name "YOUR NAME"

git config --global user.email "YOUR EMAIL ADDRESS"
```

https://help.github.com/articles/set-up-git/

Main Git commands

Clone a repository:

```
git clone username@host:/path/to/repo
```

Add changes to index:

```
git add <filename>
```

Commit changes:

```
git commit –m "Message"
```

Send changes to remote:

```
git push origin master
```

Main Git commands

Get changes from remote repo:

```
git pull
```

Move to a different branch:

```
git checkout <branch_name>
```

List of commits:

```
git log
```

GitHub

- go to https://github.com/
- search pacs-course

Fork https://help.github.com/articles/fork-a-repo/:

- fork the project into your repository
- go to your repository
- copy the clone URL
- `git clone <url>`

Link your fork to original repo:

- go to original repo
- copy the clone URL
- `git remote add upstream <url>`

GitHub

Sync a fork https://help.github.com/articles/syncing-a-fork/:

- `git fetch upstream`
- `git merge upstream/master`

Create a pull-request: https://help.github.com/articles/creating-a-pull-request/

- from github, go to your fork
- select the branch with new changes
- create a pull-request