GitHub for Astronomers

Advance Usage

Summary

Here's a quick rundown to get set up:

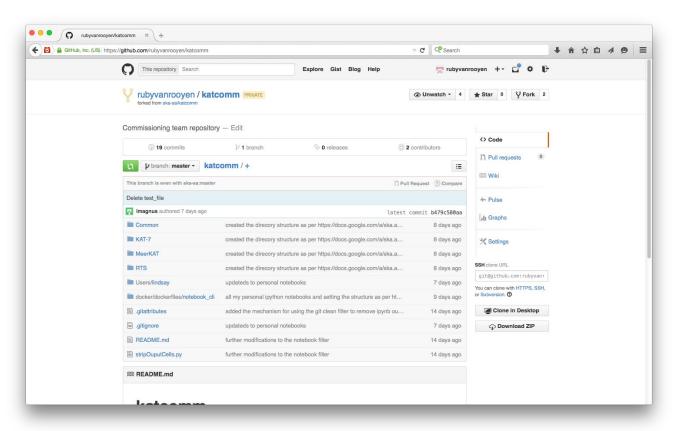
- 1. Fork the original repo
- 2. Clone your fork to your computer
- 3. Add the upstream remote pointing to the original repo

Here's a quick rundown to send a feature or bugfix back to the original project:

1. Checkout the master branch.

- 2. Pull from the upstream remote to merge updates.
- 3. Create a topic branch for your feature or bug fix.
- 4. Make your commits, with good commit messages.
- 5. Push your topic branch back to your fork on Github
- 6. Send a pull request back to the original repo.
 - 7. Converse with developers, make updates to your topic branch if necessary, and keep pushing back to your fork.
 - 8. Repeat for a new feature or bug fix.

Fork the katcomm repository

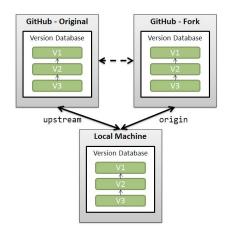


Clone and Sync katcomm repository

```
[ruby@McRubyV2-17:51:35]-#1 ~/Projects/gitScience
> git clone git@github.com:rubyvanrooyen/katcomm.git
Cloning into 'katcomm'...
Warning: untrusted X11 forwarding setup failed: xauth key data not generated
X11 forwarding request failed on channel 0
remote: Counting objects: 295, done.
remote: Total 295 (delta 0), reused 0 (delta 0), park=roused 295
```

remote: Total 295 (delta 0), reused 0 (delta 0), pack Receiving objects: 100% (295/295), 283.58 KiB | 116 Resolving deltas: 100% (115/115), done.

Checking connectivity... done.



```
[ruby@McRubyV2-17:54:51]-#1 ~/Projects/gitScience/katcomm
 git remote -v
origin git@github.com:rubyvanrooyen/katcomm.git (fetch)
origin git@github.com:rubyvanrooyen/katcomm.git (push)
[ruby@McRubyV2-17:54:54]-#1 ~/Projects/gitScience/katcomm
> git remote add upstream git@github.com:ska-sa/katcomm.git
[ruby@McRubyV2-17:55:46]-#1 ~/Projects/gitScience/katcomm
 git remote -v
origin git@github.com:rubyvanrooyen/katcomm.git (fetch)
origin git@github.com:rubyvanrooyen/katcomm.git (push)
                git@github.com:ska-sa/katcomm.git (fetch)
upstream
               git@github.com:ska-sa/katcomm.git (push)
upstream
[ruby@McRubyV2-17:55:53]-#1 ~/Projects/gitScience/katcomm
> git pull upstream master
Warning: untrusted X11 forwarding setup failed: xauth key data not generated
X11 forwarding request failed on channel 0
From github.com:ska-sa/katcomm
 * branch
                               -> FETCH_HEAD
                     master
 * [new branch]
                     master
                               -> upstream/master
Already up-to-date.
```

Creating a Branch

```
[ruby@McRubyV2-12:52:22]-#1 ~/Projects/gitScience/katcomm
> git branch -v -a
             51af4f1 Merge pull request #3 from rubyvanrooyen/master
* master
 remotes/origin/HEAD -> origin/master
 remotes/origin/master 51af4f1 Merge pull request #3 from rubyvanrooyen/master
 remotes/upstream/master 51af4f1 Merge pull request #3 from rubyvanrooyen/master
[ruby@McRubyV2-12:52:24]-#1 ~/Projects/gitScience/katcomm
> git checkout master
Already on 'master'
Your branch is up-to-date with 'origin/master'.
[ruby@McRubyV2-12:52:36]-#1 ~/Projects/gitScience/katcomm
> git checkout -b mytestbranch
Switched to a new branch 'mytestbranch'
[ruby@McRubyV2-12:52:52]-#1 ~/Projects/gitScience/katcomm
> git branch -v -a
                        51af4f1 Merge pull request #3 from rubyvanrooyen/master
 master
* mytestbranch 51af4f1 Merge pull request #3 from rubyvanrooyen/master
 remotes/origin/HEAD -> origin/master
 remotes/origin/master 51af4f1 Merge pull request #3 from rubyvanrooyen/master
 remotes/upstream/master 51af4f1 Merge pull request #3 from rubyvanrooyen/master
```

```
[ruby@McRubyV2-13:11:14]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
> cp ../../Users/ruby/oh_masers/local_utilities/when-LST.py .

[ruby@McRubyV2-13:12:49]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
> vi when-LST.py

[ruby@McRubyV2-13:15:11]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
> git add when-LST.py
```

[ruby@McRubyV2-13:15:37]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning

> git status

On branch mytestbranch Changes to be committed:

(use "git reset HEAD <file>..." to unstage)

new file: when-LST.py

```
[ruby@McRubyV2-13:29:58]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning > git commit -m "added main function to when-LST.py allow call as function from other python script" (mytestbranch 64cb111] added main function to when-LST.py allow call as function from other python script
```

I file changed, 50 insertions(+)

create mode 100755 KAT-7/planning/when-LST.py

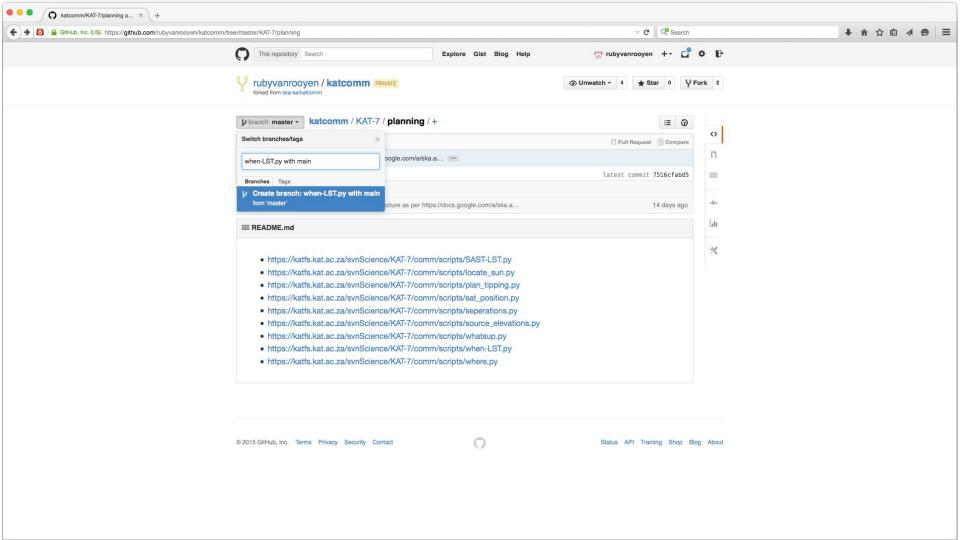
```
Switched to branch 'master'
Your branch is up-to-date with 'origin/master'.
[ruby@McRubyV2-14:14:50]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
 git pull upstream
Warning, untrusted X11 forwarding setup failed: xauth key data not generated
X11 forwarding request failed on channel 0
You asked to pull from the remote 'upstream', but did not specify
a branch. Because this is not the default configured remote
for your current branch, you must specify a branch on the command line.
[ruby@McRubyV2-14:15:02]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
  git pull upstream master
Warning: untrusted X11 forwarding setup failed: xauth key data not generated
X11 forwarding request failed on channel 0
From github.com:ska-sa/katcomm
 * branch
                              -> FETCH_HEAD
                    master
Already up-to-date.
[ruby@McRubyV2-14:15:13]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
> git checkout mytestbranch
Switched to branch 'mytestbranch'
[ruby@McRubyV2-14:15:50]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
  git rebase master
Current branch mytestbranch is up to date.
[ruby@McRubyV2-14:15:55]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
 git checkout master
Switched to branch 'master'
Your branch is up-to-date with 'origin/master'.
[rubv@McRubyV2-14:19:04]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
  git merge mytestbranch
Updating 51af4f1..64cbl11
Fast-forward
 1 file changed, 50 insertions(+)
```

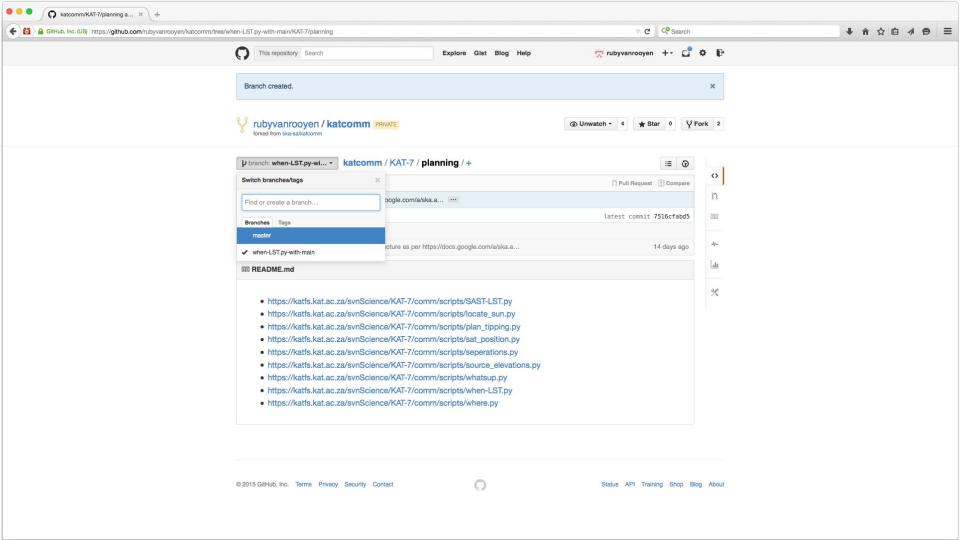
create mode 100755 KAT-7/planning/when-LST.py

[ruby@McRubyV2-14:14:43]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning

git checkout master

Creating a Branch from GitHub





```
> git branch -v -a
* master
                          a0557ab Merge branch 'master' of github.com:rubyvanrooyen/katcomm Cleaning links to large files left in commit
 remotes/origin/HEAD
                         -> origin/master
 remotes/origin/master
                         a0557ab Merge branch 'master' of github.com:rubyvanrooyen/katcomm Cleaning links to large files left in commit
 remotes/upstream/master fbb7a19 Merge pull request #2 from lmagnus/master
[ruby@McRubyV2-16:27:10]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
> git fetch origin
Warning: untrusted X11 forwarding setup failed: xauth key data not generated
X11 forwarding request failed on channel 0
From github.com:rubyvanrooyen/katcomm
* [new branch]
                    when-LST.py-with-main -> origin/when-LST.py-with-main
[rubv@McRubvV2-16:28:17]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
> git branch -v -a
                                       a0557ab Merge branch 'master' of github.com:rubyvanrooyen/katcomm Cleaning links to large files left in commit
* master
 remotes/origin/HEAD
                                       -> origin/master
                                       a0557ab Merge branch 'master' of github.com:rubyvanrooyen/katcomm Cleaning links to large files left in commit
 remotes/origin/master
 remotes/origin/when-LST.py-with-main a0557ab Merge branch 'master' of github.com:rubyvanrooyen/katcomm Cleaning links to large files left in commit
                                       fbb7a19 Merge pull request #2 from lmagnus/master
 remotes/upstream/master
[ruby@McRubyV2-16:28:22]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
> git status
```

[ruby@McRubyV2-16:27:05]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning

On branch master

Your branch is up-to-date with 'origin/master'.

```
> git checkout -b when-LST.py-with-main origin/when-LST.py-with-main
Branch when-LST.py-with-main set up to track remote branch when-LST.py-with-main from origin.
Switched to a new branch 'when-LST.py-with-main'
```

[ruby@McRubyV2-16:29:20]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning

[ruby@McRubyV2-16:28:30]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning

> git status

On branch when-LST.py-with-main

Your branch is up-to-date with 'origin/when-LST.py-with-main'.

```
[ruby@McRubyV2-16:33:06]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
> ls
./ README.md when-LST.py*

[ruby@McRubyV2-16:33:07]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
> git add when-LST.py

[ruby@McRubyV2-16:34:07]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
```

Your branch is up-to-date with 'origin/when-LST.py-with-main'.

(use "git reset HEAD <file>..." to unstage)

new file: when-LST.py

> git status

On branch when-LST.py-with-main

Changes to be committed:

```
> git commit when-LST.py -m "Added a main function so I can call the LST calculation function from another python script"
[when-LST.py-with-main eb1985e] Added a main function so I can call the LST calculation function from another python script
1 file changed, 43 insertions(+)
    create mode 100755 KAT-7/planning/when-LST.py

[ruby@McRubyV2-16:35:38]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
> git push origin when-LST.py-with-main
```

[ruby@McRubyV2-16:34:13]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning

Warning: untrusted X11 forwarding setup failed: xauth key data not generated

a0557ab..eb1985e when-LST.py-with-main -> when-LST.py-with-main

X11 forwarding request failed on channel 0

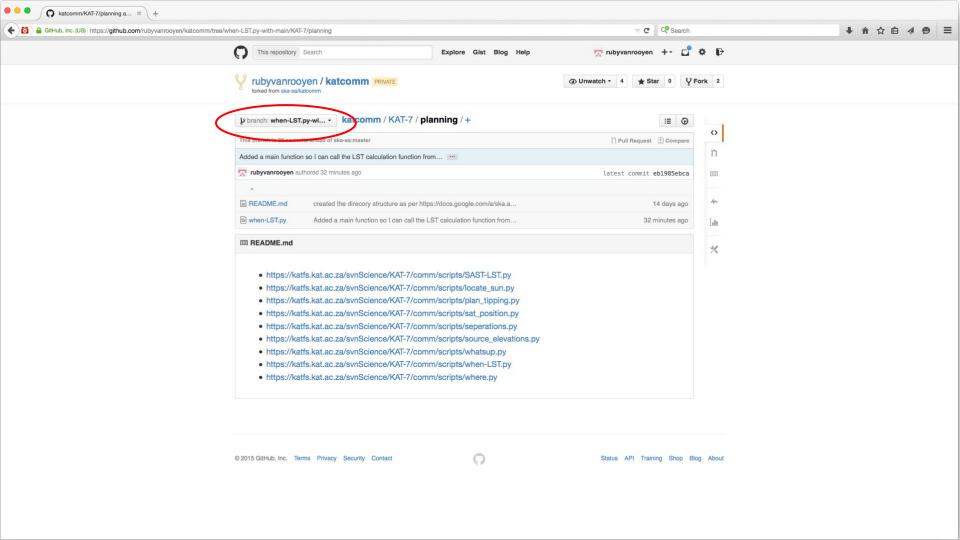
To git@github.com:rubyvanrooyen/katcomm.git

Writing objects: 100% (5/5), 1.33 KiB | 0 bytes/s, done.

Delta compression using up to 8 threads. Compressing objects: 100% (5/5), done.

Total 5 (delta 2), reused 0 (delta 0)

Counting objects: 8, done.



```
git branch -v -a
                                     a0557ab Merge branch 'master' of github.com:rubyvanrooyen/katcomm Cleaning links to large files left in commit
 master
                                     eb1985e Added a main function so I can call the LST calculation function from another python script
 when-LST.py-with-main
 remotes/origin/HEAD
                                     -> origin/master
 remotes/origin/master
                                     a0557ab Merge branch 'master' of github.com:rubyvanrooyen/katcomm Cleaning links to large files left in commit
 remotes/origin/when-LST.py-with-main eb1985e Added a main function so I can call the LST calculation function from another python script
                                     af21c75 Merge pull request #2 from lmagnus/master
 remotes/upstream/master
 [ruby@McRubyV2-17:33:58]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
> git checkout master
Switched to branch 'master'
Your branch is up-to-date with 'origin/master'.
[ruby@McRubyV2-17:34:08]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
> git pull upstream
Warning: untrusted X11 forwarding setup failed: xauth key data not generated
X11 forwarding request failed on channel 0
You asked to pull from the remote 'upstream', but did not specify
a branch. Because this is not the default configured remote
for your current branch, you must specify a branch on the command line.
[ruby@McRubyV2-17:34:23]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
> git pull upstream master
Warning: untrusted X11 forwarding setup failed: xauth key data not generated
X11 forwarding request failed on channel 0
From github.com:ska-sa/katcomm
 * branch
                              -> FETCH_HEAD
                   master
Already up-to-date.
[ruby@McRubyV2-17:35:27]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
> git checkout when-LST.py-with-main
Switched to branch 'when-LST.py-with-main'
Your branch is up-to-date with 'origin/when-LST.py-with-main'.
[ruby@McRubyV2-17:36:20]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
> git rebase master
Current branch when-LST.py-with-main is up to date.
[ruby@McRubyV2-17:36:29]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
 git checkout master
Switched to branch 'master'
Your branch is up-to-date with 'origin/master'.
[ruby@McRubyV2-17:36:43]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
 git merge when-LST.py-with-main
Updating a0557ab..eb1985e
Fast-forward
 1 file changed, 43 insertions(+)
 create mode 100755 KAT-7/planning/when-LST.py
```

[ruby@McRubyV2-17:33:48]-#l ~/Projects/gitScience/katcomm/KAT-7/planning

[ruby@McRubyV2-17:36:54]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning

> git push

Your branch is ahead of 'origin/master' by 1 commit. (use "git push" to publish your local commits)

> git status On branch master

[ruby@McRubyV2-14:20:53]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning

```
[ruby@McRubyV2-14:25:02]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning
> git push origin master
Warning: untrusted X11 forwarding setup failed: xauth key data not generated
X11 forwarding request failed on channel 0
Counting objects: 8, done.
Delta compression using up to 8 threads.
```

Compressing objects: 100% (5/5), done.

Writing objects: 100% (5/5), 1.45 KiB | 0 bytes/s, done. Total 5 (delta 2), reused 0 (delta 0)

To git@github.com:rubyvanrooyen/katcomm.git

51af4f1..64cb111 master -> master [ruby@McRubyV2-14:25:15]-#1 ~/Projects/gitScience/katcomm/KAT-7/planning

> git status On branch master Your branch is up-to-date with 'origin/master'.

