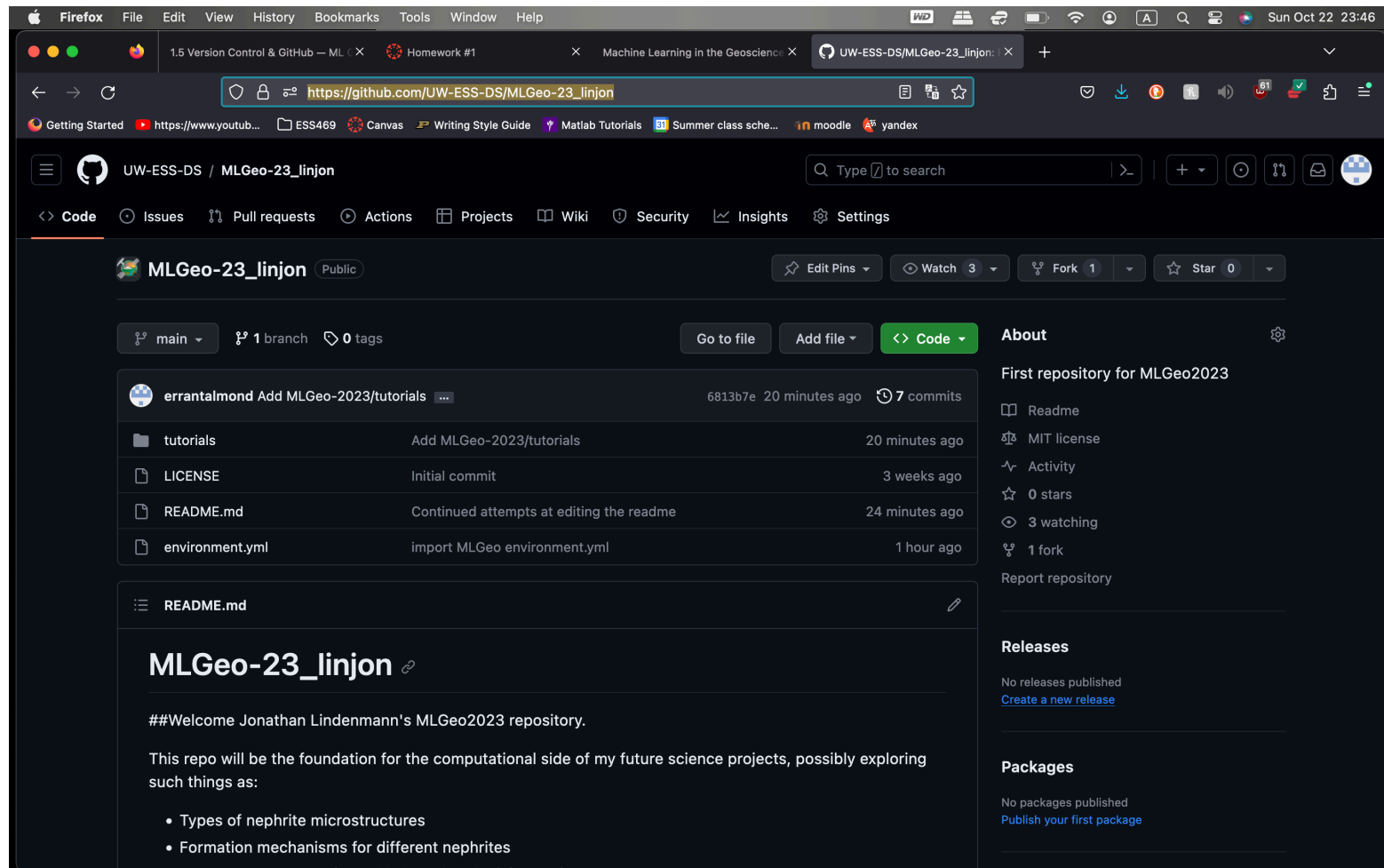


Making your own contributions to my repository

To work on anything stored in my repository, you can get all the files to your local system with a pull request. Here are the steps:

1. Access my repository on [GitHub](https://github.com/UW-ESS-DS/MLGeo-23_linjon) and click on 'fork' near the top right of the page:



2. Add some information on the following page to identify the purpose of the fork and who is working on it. You'll also want to choose yourself as the owner:

The screenshot shows a web browser window with the GitHub interface. The page title is "Create a new fork" for the repository "UW-ESS-DS / MLGeo-23_linjon". The page explains that a fork is a copy of a repository and allows for experimentation without affecting the original project. It includes a form to create a new fork with the following fields:

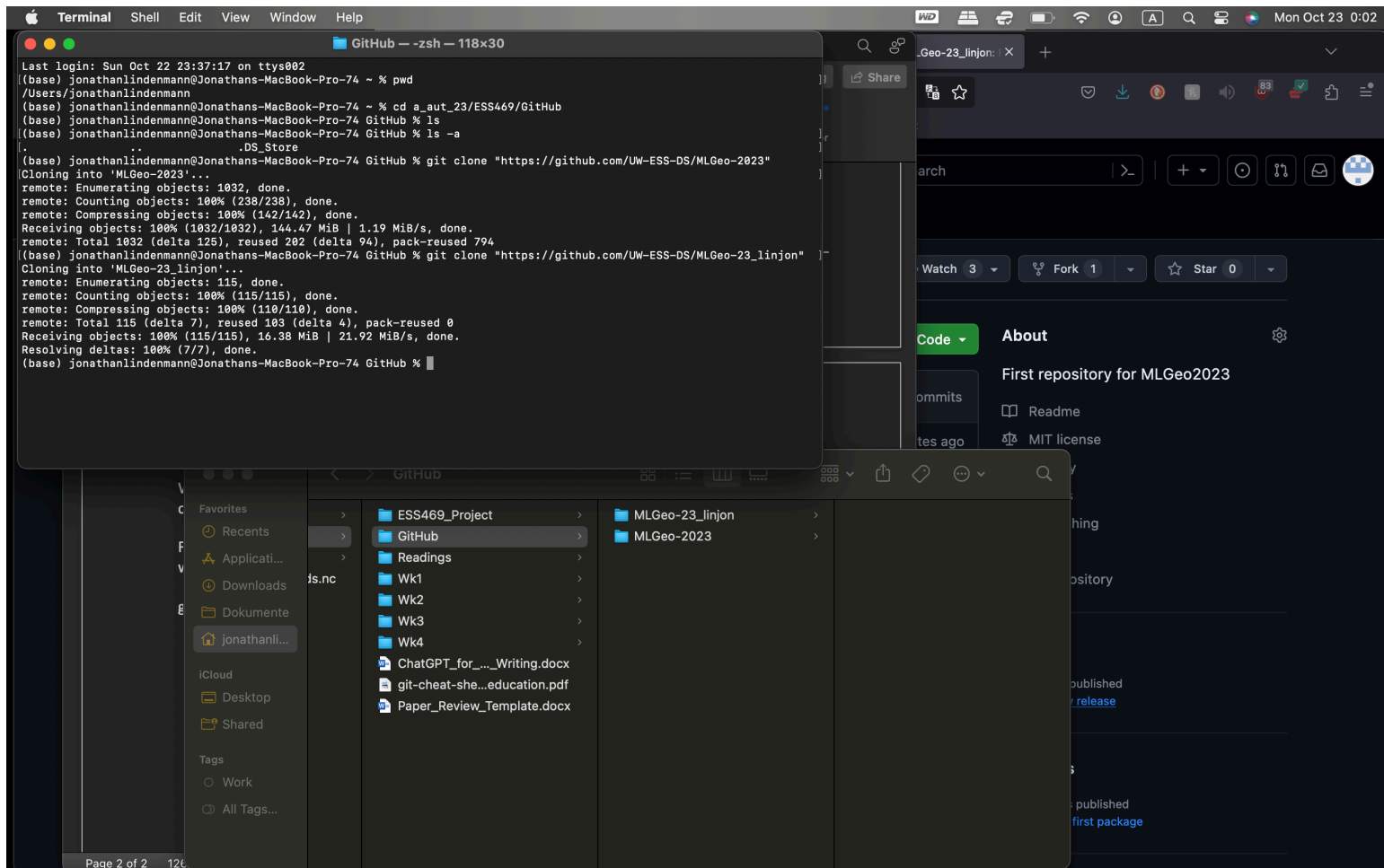
- Owner ***: A dropdown menu with "Choose an owner" selected.
- Repository name ***: A text input field containing "_Geo-23_linjon_EinsteinDebu".
- Description (optional)**: A text input field containing "For all around revisions and improvements by none other than Albert Einstein."
- Copy the main branch only**: A checked checkbox.

Below the form, there is a note: "Contribute back to UW-ESS-DS/MLGeo-23_linjon by adding your own branch. [Learn more.](#)" and a green "Create fork" button.

- With the new fork created, you can now use GitHub Desktop or a command line interface to clone your new fork onto your local system and begin working on it.

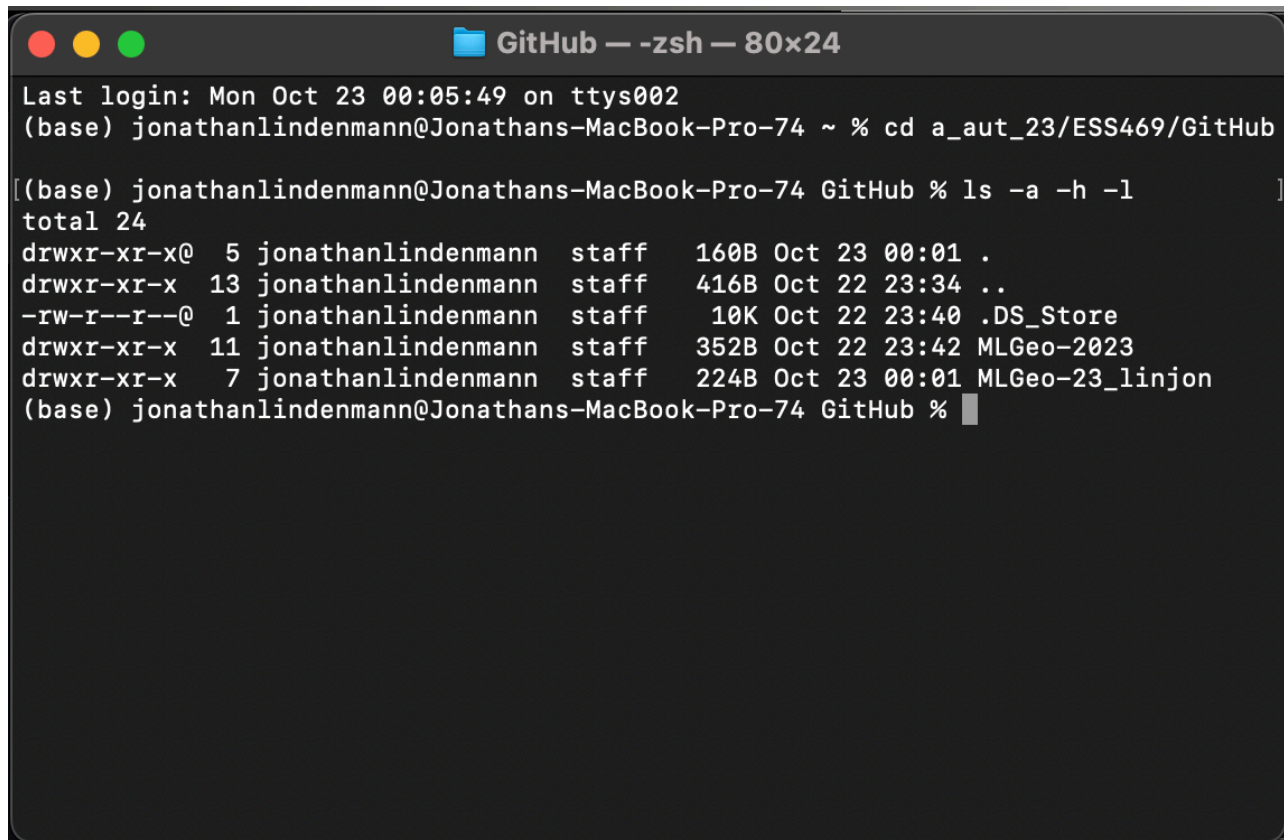
For Mac OS, simply enter the following into the terminal after navigating to the directory you want to clone to:

```
git clone "https://github.com/[YOUR_GITHUB_PAGE]/[YOUR_NEW_NAME_FOR_MY_REPO]"
```



In the image above you can see the inputs and outputs in terminal which cloned the MLGeo-23_linjon MAIN repo and the MLGeo-2023 class repo from the UW-ESS-DS GitHub organization into the .../ESS469/GitHub folder shown in the Finder.

You can see below that the GitHub folder now contains the directories (folders) of the two repositories, as well as the .git repos, represented by the '.' and '..':

A terminal window titled "GitHub — -zsh — 80x24" with standard macOS window controls (red, yellow, green buttons). The terminal shows the user "jonathanlindenmann" at "Jonathans-MacBook-Pro-74" navigating to the directory "a_aut_23/ESS469/GitHub". The command "ls -a -h -l" is executed, displaying a detailed directory listing. The output shows the current directory ".", the parent directory "..", a ".DS_Store" file, and two subdirectories: "MLGeo-2023" and "MLGeo-23_linjon".

```
Last login: Mon Oct 23 00:05:49 on ttys002
(base) jonathanlindenmann@Jonathans-MacBook-Pro-74 ~ % cd a_aut_23/ESS469/GitHub

[(base) jonathanlindenmann@Jonathans-MacBook-Pro-74 GitHub % ls -a -h -l
total 24
drwxr-xr-x@  5 jonathanlindenmann  staff   160B Oct 23 00:01 .
drwxr-xr-x  13 jonathanlindenmann  staff   416B Oct 22 23:34 ..
-rw-r--r--@  1 jonathanlindenmann  staff   10K Oct 22 23:40 .DS_Store
drwxr-xr-x  11 jonathanlindenmann  staff   352B Oct 22 23:42 MLGeo-2023
drwxr-xr-x   7 jonathanlindenmann  staff   224B Oct 23 00:01 MLGeo-23_linjon
(base) jonathanlindenmann@Jonathans-MacBook-Pro-74 GitHub %
```

4. Now, you can work on the files in the repository or add new ones. When you are finished, stage and commit them to your clone of your fork, and finally, you can submit a pull request to have your fork merged back into the main repository. For example, if I want to work on my readme.md for the main repository, I could work on it in my cloned for on my computer, and when I am finished, I can add it to the staging area for changes to commit to the cloned repository, before then pushing that commit to the remote repository on GitHub. Let's say I've worked on my readme.md a bit in VSCode and saved the file. I can now stage the file:

Check status and see what the changes are:

```
git status
```

```
git diff
```

The image below shows that these commands return the readme.md file as modified and show the changes I made.

The image shows a terminal window and a VS Code editor. The terminal window displays the output of the `git status` and `git diff` commands. The `git status` output shows that the `README.md` file is modified. The `git diff` output shows the changes made to the `README.md` file, including the addition of a new section titled "Installation/Deployment". The VS Code editor shows the `README.md` file with the changes made, including the addition of a new section titled "Installation/Deployment".

```
Last login: Mon Oct 23 01:06:01 on tty+002
(base) jonathanlindenmann@Jonathans-MacBook-Pro-74 ~ % pwd
/Users/jonathanlindenmann
(base) jonathanlindenmann@Jonathans-MacBook-Pro-74 ~ % cd a_git_23/ESS049/GitHub/MLGeo-23_linjon
(base) jonathanlindenmann@Jonathans-MacBook-Pro-74 MLGeo-23_linjon % ls
LICENSE  README.md  environment.yml  tutorials
(base) jonathanlindenmann@Jonathans-MacBook-Pro-74 MLGeo-23_linjon % git status
On branch main
Your branch is up to date with 'origin/main'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   README.md

no changes added to commit (use "git add" and/or "git commit -a")
(base) jonathanlindenmann@Jonathans-MacBook-Pro-74 MLGeo-23_linjon % git diff
diff --git a/README.md b/README.md
index 240f8ec..b06e8c9 100644
--- a/README.md
+++ b/README.md
@@ -15,12 +15,22 @@
 #Getting started
 This repository is stored in the [UW-ESS-05 GitHub](https://github.com/UW-ESS-05) organization and contains a copy of 'environment.yml' from the class repository [UW-ESS-05/MLGeo-2023](https://github.com/UW-ESS-05/MLGeo-2023).

-To access and work on any of my projects, you can clone my repository by typing the following into the CLI c
ommand line:
+To access and work on any of my projects, you can fork and clone my repository by following the instructions
in the 'HowtoContribute.pdf' document. To summarize here, you'll be making a fork of this repo, then putting
it all on your own computer using GitHub Desktop or entering the following commands in the command line inte
rface:
+1. Fork the repo, giving it a name and making yourself the owner.
+2. Open your terminal and navigate your working directory to the location you want to clone the repo to using
'cd directory_name' and 'ls' commands. Once there, enter:
+...skiping...
diff --git a/README.md b/README.md
index 240f8ec..b06e8c9 100644
--- a/README.md
+++ b/README.md
@@ -15,12 +15,22 @@
 #Getting started
 This repository is stored in the [UW-ESS-05 GitHub](https://github.com/UW-ESS-05) organization and contains a
copy of 'environment.yml' from the class repository [UW-ESS-05/MLGeo-2023](https://github.com/UW-ESS-05/MLGe
o-2023).

-To access and work on any of my projects, you can clone my repository by typin the following into the CLI co
mmand line:
+To access and work on any of my projects, you can fork and clone my repository by following the instructions
in the 'HowtoContribute.pdf' document. To summarize here, you'll be making a fork of this repo, then putting
it all on your own computer using GitHub Desktop or entering the following commands in the command line inte
rface:
+1. Fork the repo, giving it a name and making yourself the owner.
+2. Open your terminal and navigate your working directory to the location you want to clone the repo to using
'cd directory_name' and 'ls' commands. Once there, enter:
+git clone "https://github.com/YOUR_GITHUB_PAGE/YOUR_NEW_NAME_FOR_MY_REPO"

## Installation/Deployment

## Basic Usage: step-by-step instructions to use the software

This section covers coding commands and techniques from MLGeo2023 classes.

For the command line interface (CLI):

mkdir xxx - makes a new directory 'xxx'.

## Contributing: detail the type of contributions welcome

## Contact information / getting help: guidelines on how to get in touch
```

Next, we want to stage the changes, and to see what is staged. The only file with changes is the readme file, so:

```
git add README.md
```

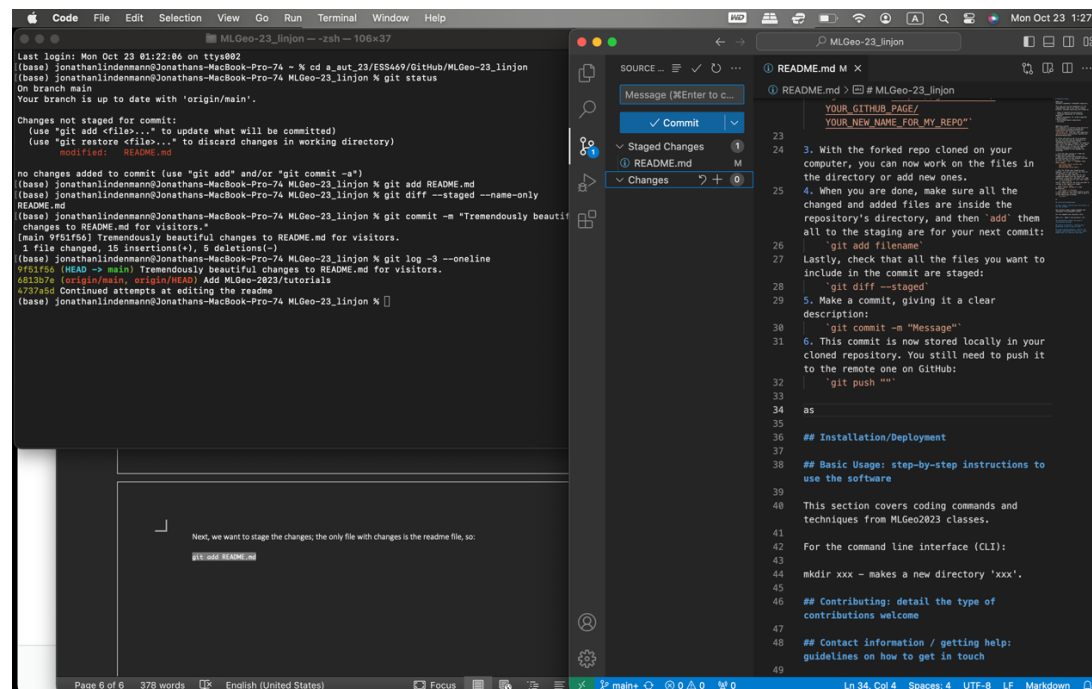
```
git diff --staged --name-only
```

Now we can commit the changes and check if it worked with `git log`:

```
git commit -m "Tremendously beautiful changes to README.md for visitors."
```

```
git log -3 --oneline
```

The image below shows all these steps in the terminal on the left, with the changes open in the editor on the right. The VSCode UI for the same commit process is visible there:



- The final step is to push the commit to your remote forked repo on GitHub (you can then go on to create a pull request on GitHub to have the code merged with the main repo). However, it's best to first pull the repo, just in case you are missing some fresh changes on your local version:

```
git pull
```

```
git push
```

Now you've pushed the commits onto Github. And you're all done! See the image below or the final steps in Terminal and the changes reflected on the online Github repository.

