Diffusion Models Bootcamp Step 1 - Setup Laboratory Repo

Note: These instructions assume you have already followed basic Vector cluster account setup, including initial access, changing your password, and <u>setting up multifactor authentication</u>. These instructions have been sent to you from the Vector Ops Team. Multifactor authentication is now required upon all connections to the Vector cluster.

Overview: In this section, you will create ssh keys on the Vector cluster in order to connect to the rag_bootcamp GitHub repository. You will need to add these ssh keys to your GitHub profile in order to access code.
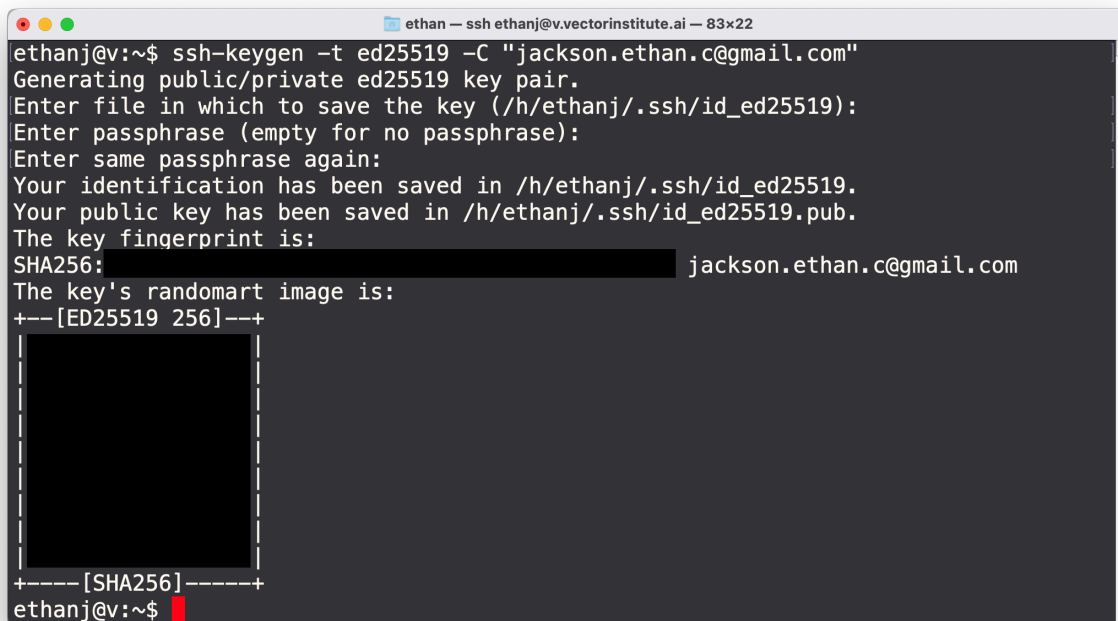
1. Login to Vaughan (Vector cluster) over ssh using your login credentials (replace **username** with your own Vector username). **If you are using Windows**, use Windows PowerShell to run local commands, including the following one. Otherwise, use Terminal.

```
ssh <username>@v.vectorinstitute.ai
```

2. Once logged into Vaughan, create ssh keys (replace **your_email@example.com** with your GitHub account email address. For additional reference, see information [here](#).

```
ssh-keygen -t ed25519 -C "your_email@example.com"
```

When prompted to choose a file in which to save the key, just press Enter for the default.


3. Show your **public key** in the terminal and copy it to the clipboard.

```
cat $HOME/.ssh/id_ed25519.pub
```

This entire line is my personal key. Don't use this one, use the output in your terminal!

```
ethanj@v:~$ cat /h/ethanj/.ssh/id_ed25519.pub
ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIAhZUHQ3yASMKXjpmmhNvuWwRt5wd+0sSnfdV9OBpVS7 jackson.ethan.c@gmail.com
ethanj@v:~$
```
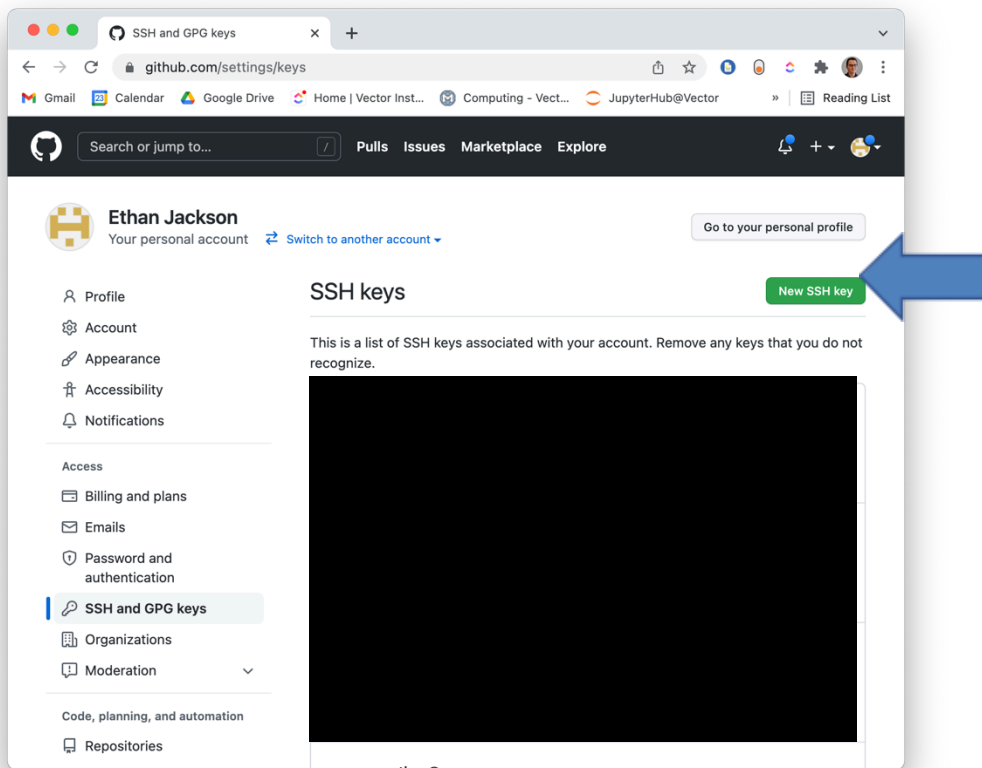
4. Add this ssh key to your GitHub profile.
    a. Log into your GitHub account and navigate to Settings.
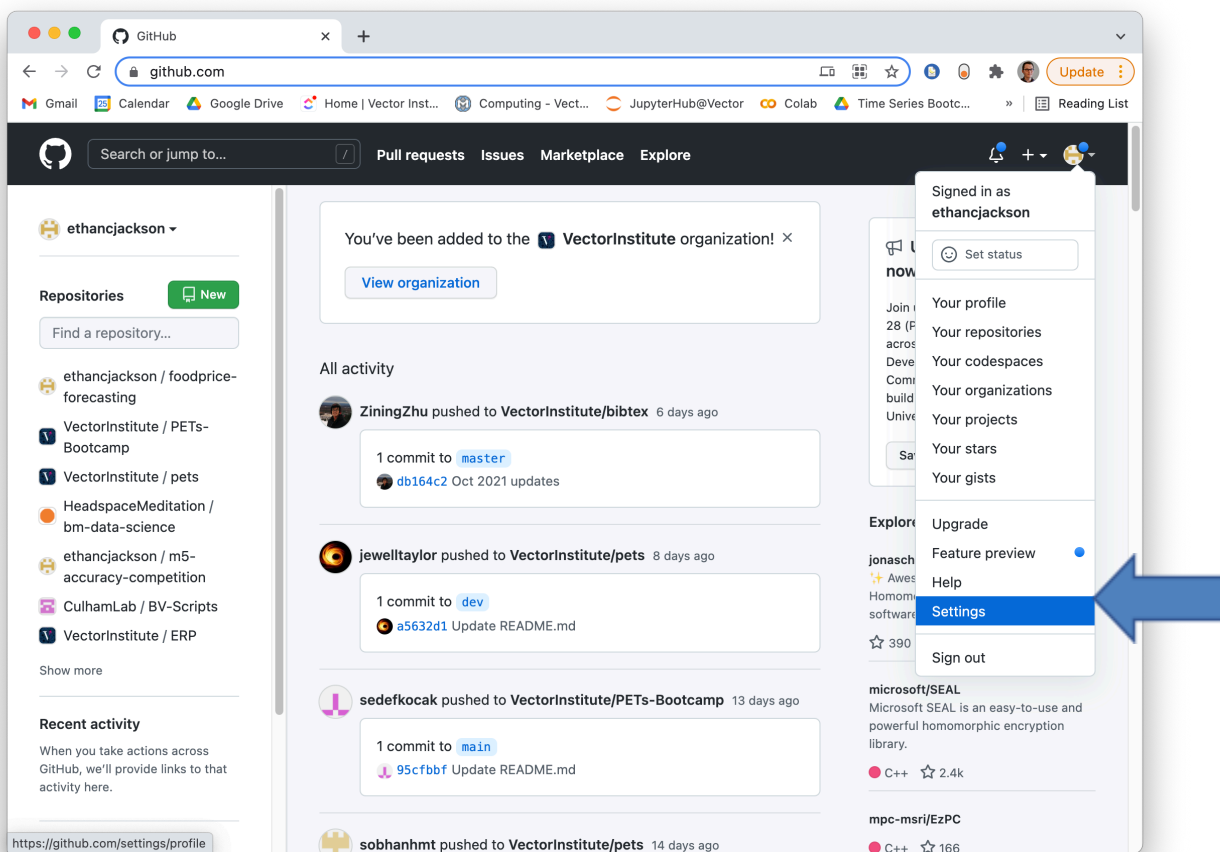
b. Navigate to the SSH and GPG keys page.
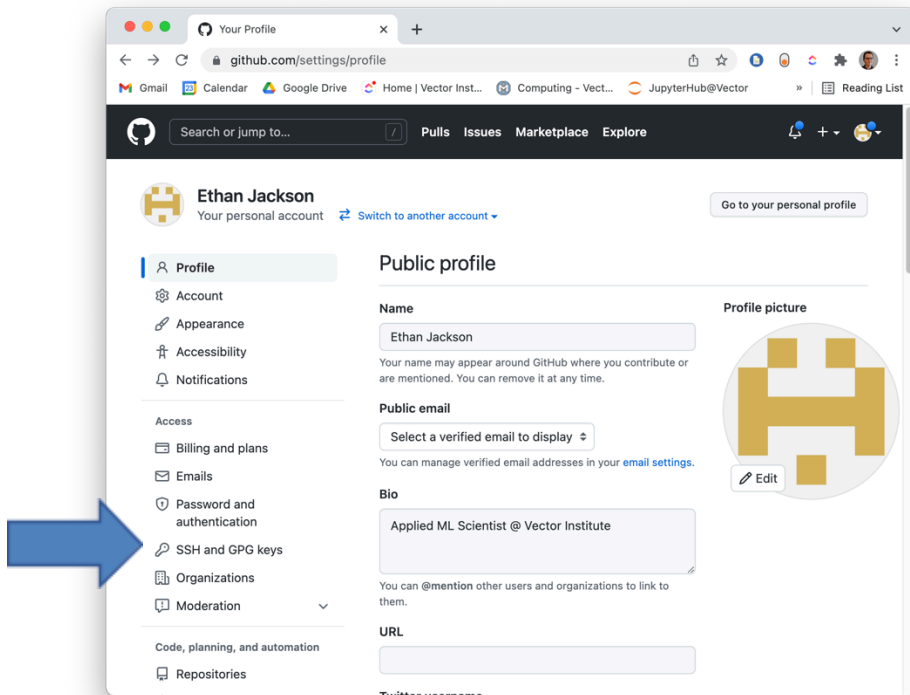
C. Click on the "New SSH key" button

d. Give your key a title and paste your public ssh key into the key field. Complete the process by clicking "Add SSH key". **Be sure to use your own personal public key**!
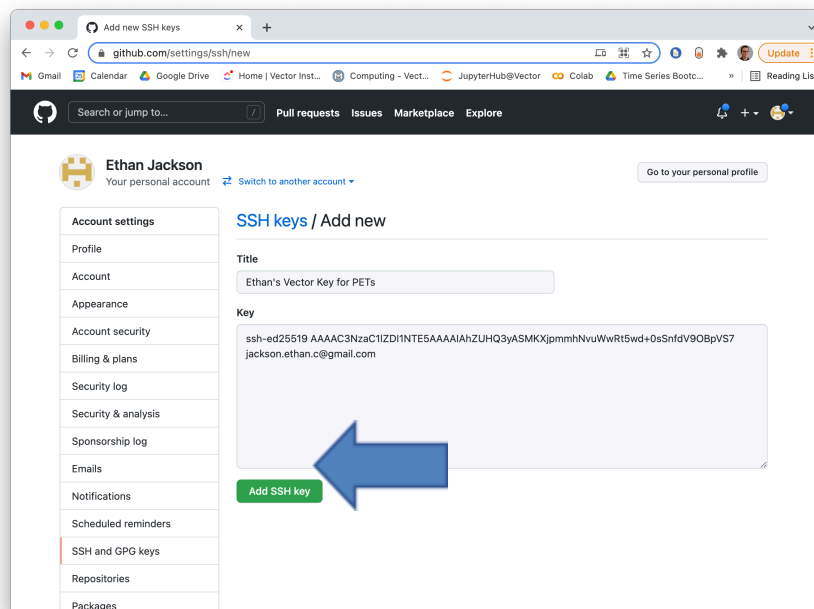
e. Finally, you may be required to enter your GitHub password to complete the process.

5. Return to your terminal session and clone the `diffusion_model_bootcamp` repository into your home directory.

```
git clone git@github.com:VectorInstitute/diffusion_model_bootcamp.git
```

```
(p3.9) sayromlou@v3:~/test$ git clone git@github.com:VectorInstitute/diffusion_model_bootcamp.git
Cloning into 'diffusion_model_bootcamp'...
remote: Enumerating objects: 2219, done.
remote: Counting objects: 100% (458/458), done.
remote: Compressing objects: 100% (224/224), done.
remote: Total 2219 (delta 229), reused 439 (delta 223), pack-reused 1761
Receiving objects: 100% (2219/2219), 137.50 MiB | 30.40 MiB/s, done.
Resolving deltas: 100% (1207/1207), done.
Checking out files: 100% (468/468), done.
```

If the Github repository is private, then the above command will fail with a "Repository not found" message. In this case, an administrator will need to add the individual github user accounts via the following url: https://github.com/VectorInstitute/diffusion_model_bootcamp

6. Once you have successfully cloned the `diffusion_model_bootcamp` repository, please proceed to setting up VPN and JupyterHub access.