

- 1) Pick a VM configuration (in the CV project)
 - a) Pick like at least 500 gb memory
 - b) Remember that it charges whenever your machine is on so even if you leave the machine, make sure you terminate it in console
 - c) Check allow HTTP + HTTPS traffic
- 2) SSH into via the GCP Console (it's the SSH button next to the VM's name)
- 3) Run these commands for git:
 - a) `sudo apt-get update`
 - b) `sudo apt-get install git`
- 4) Set up github username
 - a) `git config --global user.name "{your username}"`
 - b) `git config --global user.email {your email}`
- 5) git clone <https://github.com/SammyAgrawal/CVProject.git>
- 6) `gsutil cp -nR gs://3d-dicty-data/2023-01-30/dicty_factin_pip3-06_processed.czi .`
- 7) Go to gcloud console sidebar -> VPC Network -> IP Addresses -> pick yours and upgrade it to static
 - a) Now go to Firewall and create a new rule
 - b) Set Targets to All instances in the network
 - c) 0.0.0.0/0 for IPv4 Ranges
 - d) Allow all protocols + ports
 - e) Make a random tag
- 8) `wget https://repo.anaconda.com/archive/Anaconda3-2024.02-1-Linux-x86_64.sh`
- 9) `bash Anaconda3-2024.02-1-Linux-x86_64.sh`
 - a) Press q + agree to the terms
 - b) Say yes to everything
- 10) `source ~/.bashrc`
- 11) `export PATH="$HOME/anaconda3/bin:$PATH"`
 - a) You might have to run this on reboot every time but there's definitely a command to make it permanent idk what it is tho
- 12) `jupyter notebook --generate-config`
 - a) `jupyter --config-dir`
 - b) Navigate to that directory
 - c) Vim into the python file
 - d) Add:
 - i) `c = get_config()`
 - ii) `c.NotebookApp.ip = '*'`
 - iii) `c.NotebookApp.open_browser = False`
 - iv) `c.NotebookApp.port = <Port Number>`
- 13) `jupyter-notebook --no-browser --port=<PORT-NUMBER>`
- 14) Copy the link jupyter notebook gives you into your browser but change the IP from localhost to whatever IP your VM uses (it's in the console)
- 15) In order to use a conda environment do conda activate before you create the notebook
 - a) You want to create with the requirements.txt it wont work if you try to pip insall after because of the ==

16) Use screen to run stuff in the background (like training a big model)

17) STOP YOUR INSTANCE WHEN UR DONE

18) To set up Github~

- a) In github In the upper-right corner of any page, click your profile photo, then click **Settings**.
- b) In the left sidebar, click **Developer settings**.
- c) In the left sidebar, under **Personal access tokens**, click **Tokens (classic)**. Select **Generate new token**, then click **Generate new token (classic)**.
- d) Select the scopes you'd like to grant this token. To use your token to access repositories from the command line, select **repo**. I did all repos to make it simple
- e) Click **Generate token**.
- f) Copy the token and keep it somewhere safe
- g) When you push, put the token as your password