



CERBERUS PROJECT MANUAL

Instruction Manual



JULY 12, 2020

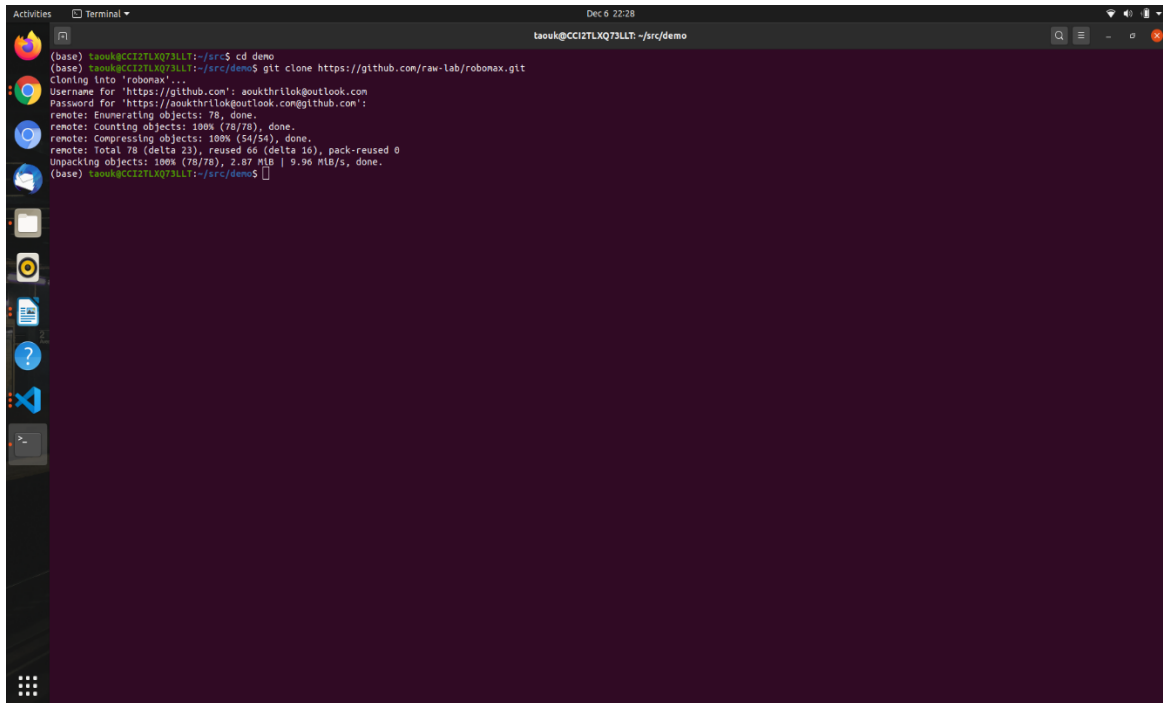
RAW LAB

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1.Clone the Cerberus Repository to your Local Computer

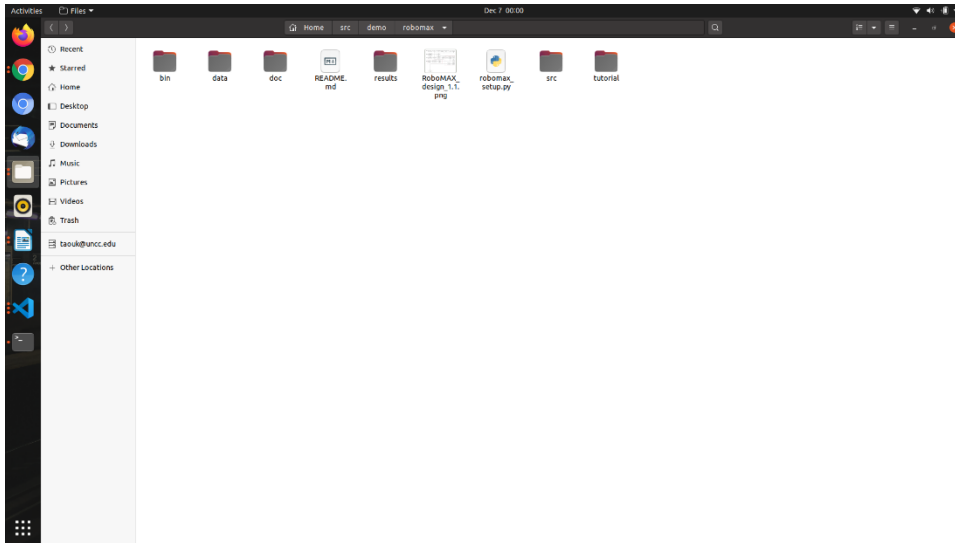
- Open Terminal
- Select the folder path
- enter “git clone <https://github.com/raw-lab/cerberus.git>” in the selected folder path to clone the repo into it.
- Cerberus directory will be created.



```
(base) taouk@CCI2TLXQ73LLT:~/src$ cd demo
(base) taouk@CCI2TLXQ73LLT:~/src/demo$ git clone https://github.com/raw-lab/robonax.git
Cloning into 'robonax'...
Username for 'https://github.com': aoukthrilok@outlook.com
Password for 'https://aoukthrilok@outlook.com:github.com':
remote: Enumerating objects: 78, done.
remote: Counting objects: 100% (78/78), done.
remote: Compressing objects: 100% (54/54), done.
remote: Total 78 (delta 23), reused 66 (delta 16), pack-reused 0
Unpacking objects: 100% (78/78), 2.87 MiB | 9.96 MiB/s, done.
(base) taouk@CCI2TLXQ73LLT:~/src/demo$
```

2.Run Setup File

- Open cerberus folder



- Run setup “cerberus_setup.py”
- Following things will be done on running setup file:
 1. It will create directory “Cerberus” on desktop
 2. It will install all dependencies from the setup file
 3. It also download osf files and Latest Version of Primary code file.

```
Activities Terminal Dec 6 23:47
taouk@CCI2TLXQ73LIT: ~/src/demo/robomax
2020-12-06 23:46:04 (15.9 MB/s) - 'FOAM-hnn_relia.hnn.gz' saved [1137392478/1137392478]
Collecting package metadata (current_repodata.json): done
Solving environment: done

## Package Plan ##
  environment location: /home/taouk/anaconda3
  added / updated specs:
    - prokka

The following packages will be downloaded:
  package ----- build -----
  ca-certificates-2020.12.5 | ha878542_0 | 137 KB | conda-forge
  certifi-2020.12.5 | py38h578d9bd_0 | 143 KB | conda-forge
  openssl-1.1.1h | h516999a_0 | 2.1 MB | conda-forge
  -----
  Total: 2.4 MB

The following NEW packages will be INSTALLED:
  python_abi conda-forge/linux-64::python_abi-3.8-1_cp38

The following packages will be UPDATED:
  ca-certificates pkgs/main::ca-certificates-2020.10.14- --> conda-forge::ca-certificates-2020.12.5-ha878542_0
  certifi pkgs/main::certifi-2020.11.8-py38h06a- --> conda-forge::certifi-2020.12.5-py38h578d9bd_0

The following packages will be SUPERSEDED by a higher-priority channel:
  conda pkgs/main::conda-4.9.2-py38h06a1308_0 --> conda-forge::conda-4.9.2-py38h578d9bd_0
  openssl pkgs/main::openssl-1.1.1h-h7b0441c_0 --> conda-forge::openssl-1.1.1h-h516999a_0

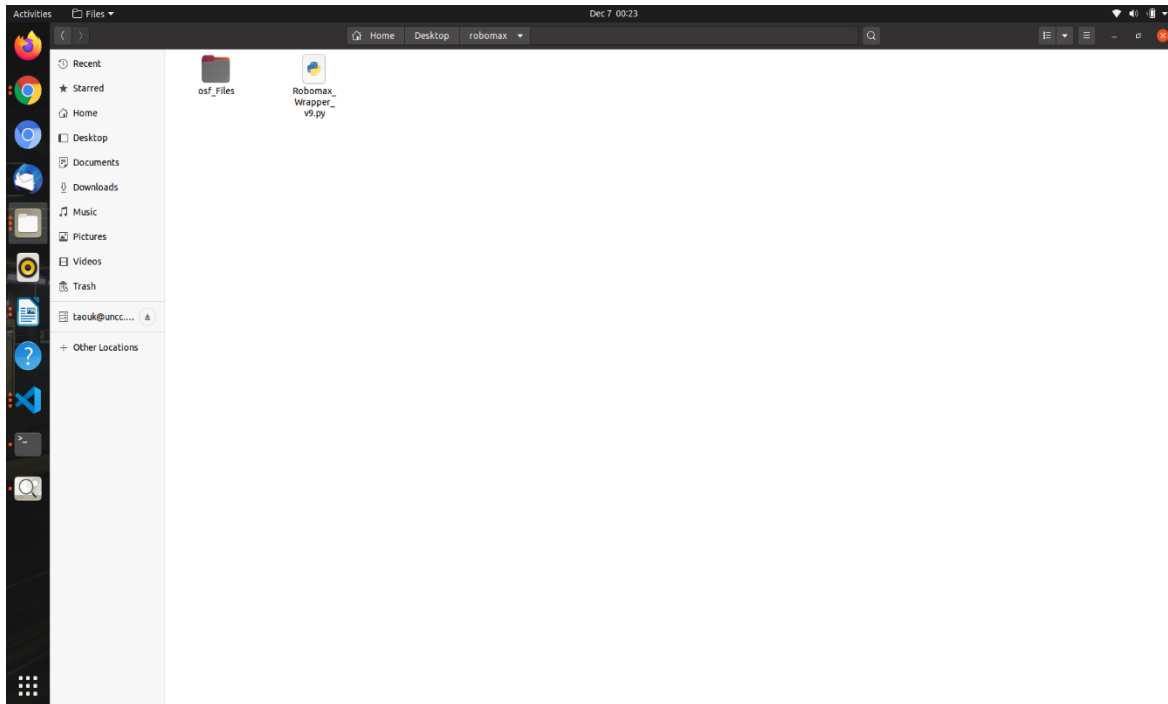
Proceed ([y]/n)? y

Downloading and Extracting Packages
openssl-1.1.1h | 2.1 MB | ##### 100%
ca-certificates-2020 | 137 KB | ##### 100%
certifi-2020.12.5 | 143 KB | ##### 100%
Preparing transaction: done
Verifying transaction: done
Executing transaction: done
Collecting package metadata (current_repodata.json): done
Solving environment: done

# All requested packages already installed.

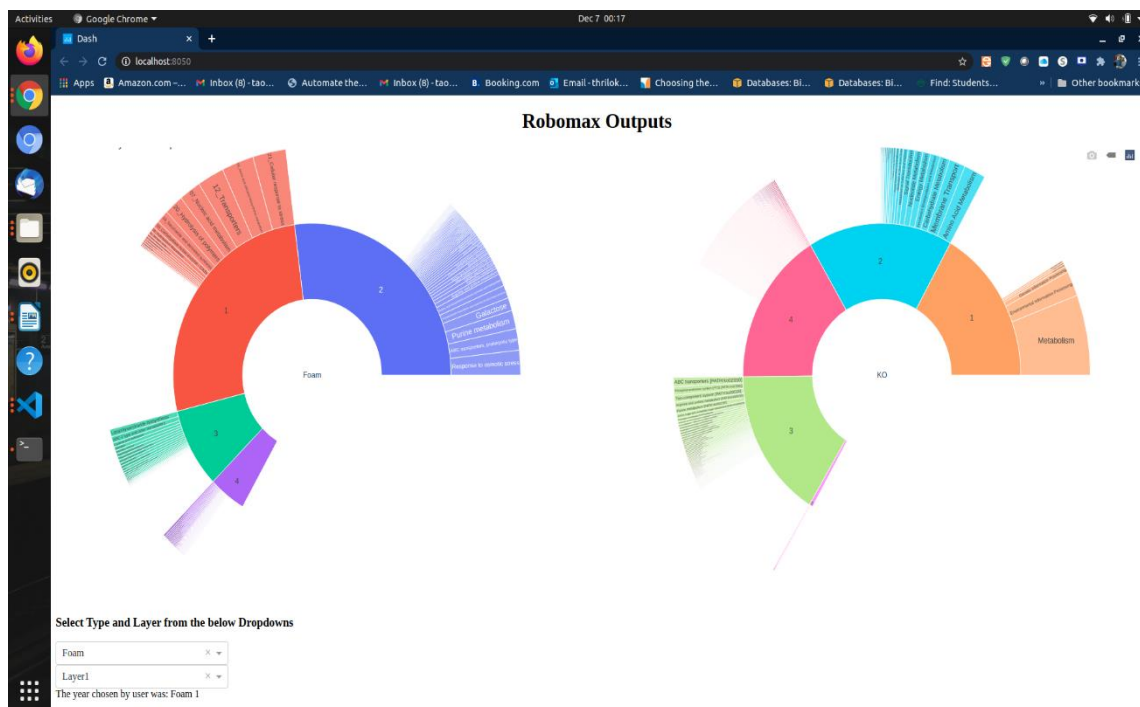
Collecting package metadata (current_repodata.json): done
Solving environment: done
```

Current Version “Cerberus.py” file and osf_files in cerberus folder.



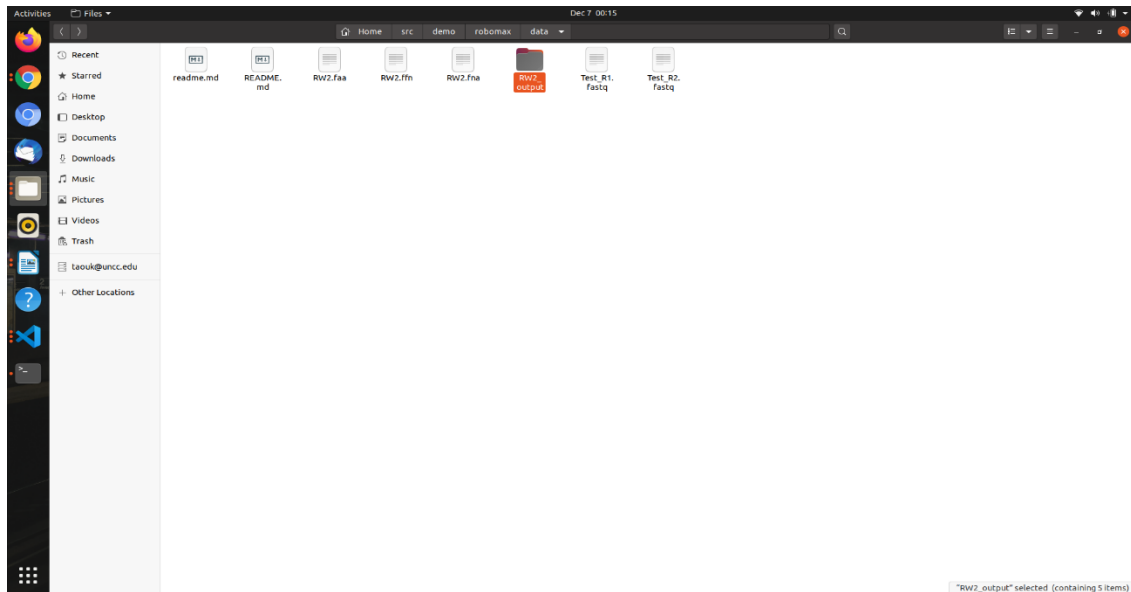
3. Running code by passing data file

- We should give input file path along with the Wrapper Code followed by '-i'
- The input data file should be one of the following types:
{faa,fna,ffn,rollup}
- Once the program starts it may take 20-70 min to complete the process.
- After execution of code, It will open a localhost browser with some visualization based on the Output files. (These outputs are also saved in Output files folder)

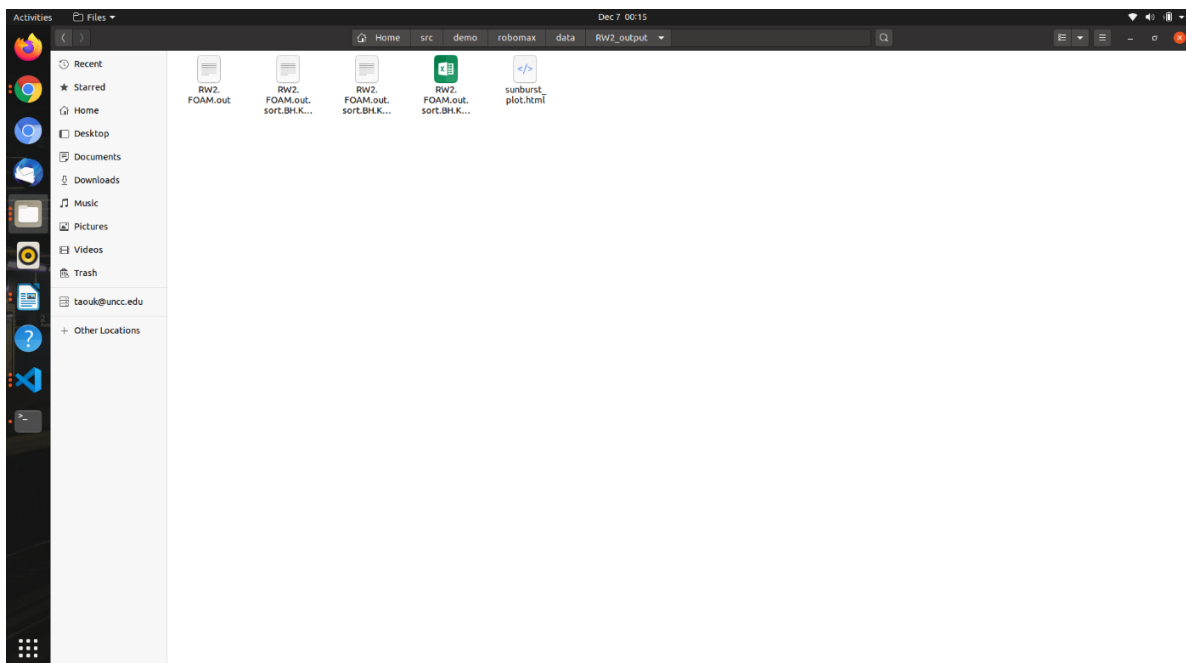


4. Output Files

- Output folder will be created on the input folder path.
- Let the Input be RW2.faa, the output folder created will be RW2_output.



- Output folder (RW2_output here) has following Files.



5.visualisation outputs based on output file

- Once the program is executed the visuals will be displayed on screen.
- If you want to open those visuals again.
- Please run the step 3 again but here, the input data file will be the rollout file (which is generated in the Output folder)
- It will generate the Visuals in the Localhost browser as shown in figure.

