

Git and GitHub



My Life

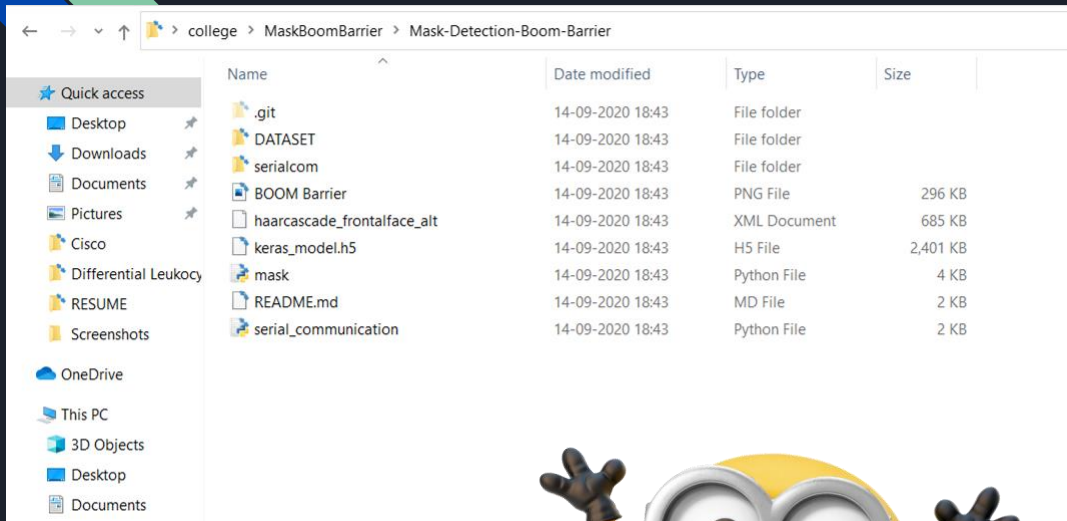
WHAAAA?!?!?



localhost:8888/tree			
jupyter			
<input type="checkbox"/>	Web Scrapping.ipynb		
<input type="checkbox"/>	WRIG CALIBRATION 1.ipynb		
<input type="checkbox"/>	WRIG CALIBRATION 2.ipynb		
<input type="checkbox"/>	WRIG CALIBRATION 3 Calibration complete.ipynb		
<input type="checkbox"/>	WRIG FINAL TRY.ipynb		
<input type="checkbox"/>	WRIG FINAL.ipynb		
<input type="checkbox"/>	WRIG testing.ipynb		
<input type="checkbox"/>	Wrig testing1.ipynb	19 13:03	File folder
<input type="checkbox"/>	wrig working.ipynb	19 13:54	File folder

Documents	captureupload	06-06-2019 23:13	File folder
Pictures	download_from_server	12-01-2019 14:01	File folder
Cisco	download_from_server_2	16-01-2019 00:25	File folder
Differential Leukocy	ESP32-OV7670-WebSocket-Camera-mast...	03-04-2019 13:12	File folder
RESUME	final	20-01-2019 23:43	File folder
Screenshots	FINAL COHORT 2	06-06-2019 16:04	File folder
OneDrive	home	20-01-2019 17:24	File folder
This PC	lock	05-06-2019 18:11	File folder
3D Objects	lockopen	05-02-2019 12:36	File folder
Desktop	OV7670_Web	04-04-2019 12:39	File folder
Documents	sendlink	06-06-2019 13:57	File folder
Downloads	Smart_config	07-04-2019 23:25	File folder
Music	subscribe_publish	20-01-2019 17:01	File folder
Pictures	upload_to_server	07-01-2019 14:59	File folder
Videos	uploadimagefrombuffer	04-06-2019 16:09	File folder
MUSKAN (C:)	vibration_buzzer	07-01-2019 14:34	File folder
	vibration_buzzer_cloud	07-01-2019 15:46	File folder
	vibration_sensor	02-04-2019 17:33	File folder

Life after Git



MINGW64:/c:/Users/DellUser/Desktop/college/MaskBoomBarrier/Mask-Detection-Boom-Barrier

Author: Devansh Chawla <devansh@vt.edu>

Date: Sat Jun 20 17:51:12 2020 +0530

Merge pull request #3 from Devansh16/master

Updated Mask Detection

commit b5dfec9799c3dd4e64078914d5a5df9df002d466

Author: Devansh Chawla <devansh@vt.edu>

Date: Sat Jun 20 17:49:02 2020 +0530

Updated Mask Detection

commit c8e4c7104427cc02d1312c2807d8ef2e97f882d5

Author: jainmuskan <jainmuskan9@gmail.com>

Date: Sat Jun 20 17:31:09 2020 +0530

Added serial communication protocol for interaction with Arduino

commit bb36f094769bc7f664e295b6d76f664dbec01b15

Author: Devansh Chawla <devansh@vt.edu>

Date: Sat Jun 20 16:59:58 2020 +0530

Imported Trained Model

commit 9fff2a0de6c6e17d515a4d9a1540ed8b0c09ada

Author: Devansh Chawla <devansh@vt.edu>

Date: Sat Jun 20 16:59:10 2020 +0530

Added Face Detection Model

commit ce0443f1fd37783ab585f0ce4dec2e7f26568cda

Author: jainmuskan <jainmuskan9@gmail.com>

Date: Sat Jun 20 16:16:34 2020 +0530

Trained model

commit 4b9b3efea74967c008be83c96cf1c0436cc7e4e7

Merge: 63c0d7a 8049801

Author: Devansh Chawla <devansh@vt.edu>

Date: Sat Jun 20 15:19:37 2020 +0530

Merge pull request #1 from Devansh16/master

Mask DetectionModel Tested

commit 80498019072f6963cbee76152c0247bcabaa3160

Author: Devansh Chawla <devansh@vt.edu>

Date: Sat Jun 20 15:18:05 2020 +0530

Mask DetectionModel Tested

commit 63c0d7a2559e6530a83f1283d6d677654b029fb0

Author: jainmuskan <jainmuskan9@gmail.com>

Date: Sat Jun 20 12:44:45 2020 +0530

Initailised README.md

Version Control System

Keeps track of the changes that we make to our files

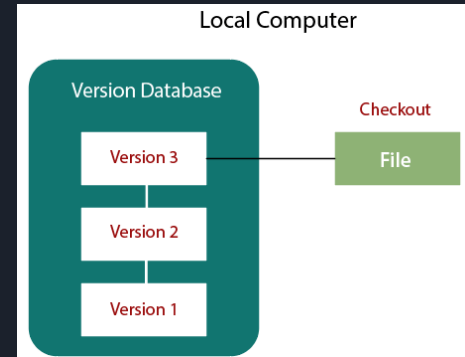
Keeps track of when the changes were made and who made them.

Helps in easily reverting a change if it turned out not to be a good idea.

It makes collaboration easier by allowing us to merge changes from lots of different sources.

we can make edits to multiple files and treat that collection of edits as a single change which is commonly known as a, commit.

Allows the author of a commit to record why the change was made, including what bugs, tickets or issues were fixed by the change





GIT

Git is one of the most famous popular VCS

It has a distributed architecture, i.e. every person contributing to a repository has full copy of the repository on their own development machines.

Collaborators can share and pull in changes that others have made as they need. And because the repositories are all local to the computer being used to create the files, most operations can be done really fast

If you want to collaborate with others, set up a repository on a server (GitHub, GitLab, BitBucket) to act as a kind of hub for everyone to interact with

Other VCS are subversion, mercurial



Git Installation (Linux)

Check if pre installed: `git --version`

Install:

`sudo apt update`

`sudo apt install git`

`git --version`





Git Installation (Windows)

<https://gitforwindows.org>

Keep default options (except editor as vim)

Choose Visual Code Studio/ any other preferred text editor of your choice.





Working Tree

Area outside the git directory is the working tree. It has the current version of the project.

It has all the files tracked by git and any new file that we have added that is not yet added to the list of tracked files.



Git add

To make Git track our file we use `git add` command

This adds the file to staging area.

The staging area which is also known as the index is a file maintained by Git that contains all of the information about what files and changes are going to go into your next command.



Git commit

The "commit" command is used to save your changes to the local repository



Tracking Changes

If a file is in the **modified state**, it means that we've made changes (adding, modifying or deleting the contents) to it that we haven't committed yet.

Git notices anytime we modify our files, but won't store any changes until we add them to the staging area.

By **staging**, we mark those changes for tracking.

By **committing** we store those changes in the VCS

