Why is GitHub Important?

...

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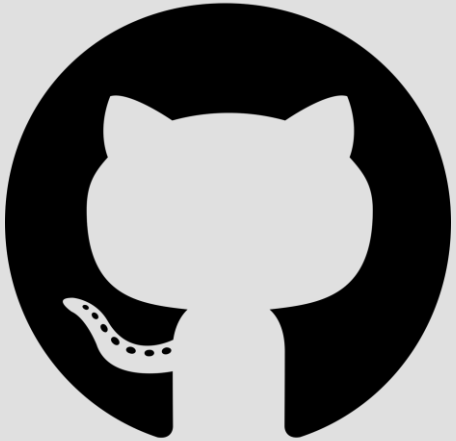
Assisted by
Man Hei CHENG (Melvin),
Miss Hiu Yi HO (Queenie),
Miss Yan Tung LEUNG (Nikki)

What is GitHub?

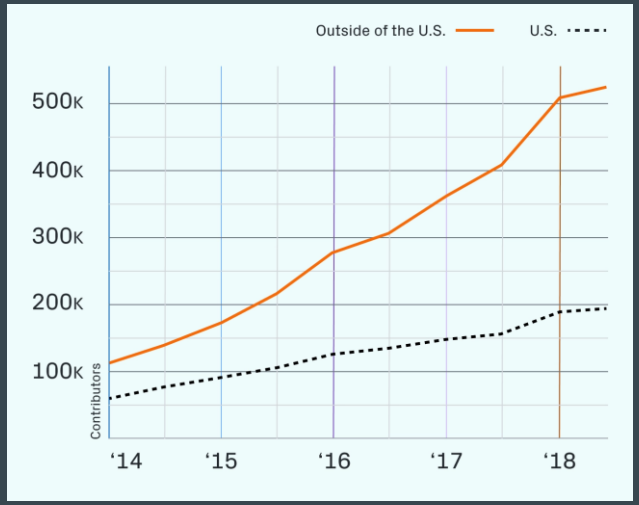


What is Github?

- A social network and platform for software developers
- Over 65 million users
- A place to Share, Communicate, Collaborate with others, especially programmers

What's on GitHub

- Over 100 million live Projects
- New projects increasing over the years
- Showing the trend of using GitHub for Software development



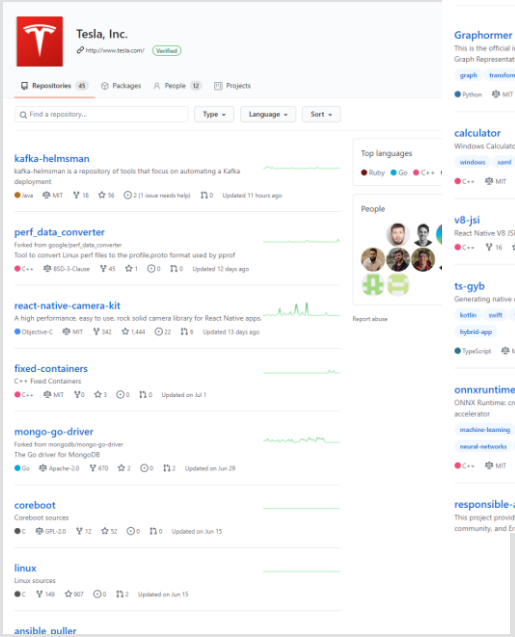
Variety of GitHub

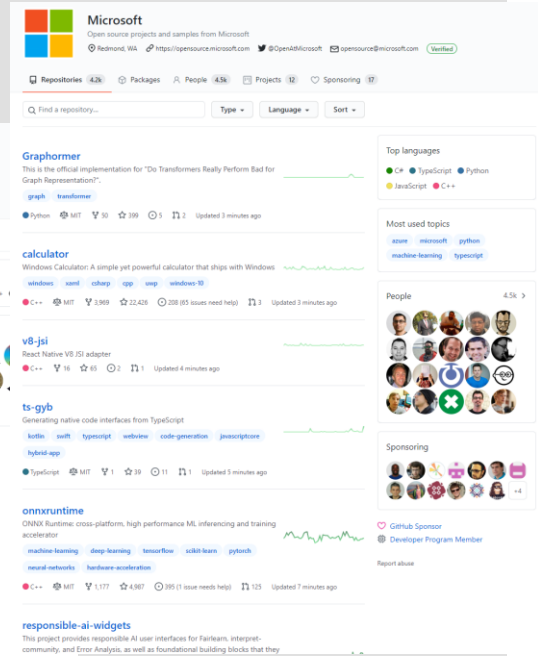
- Countless topics and projects available for the public
- Encompassing most popular topics nowadays

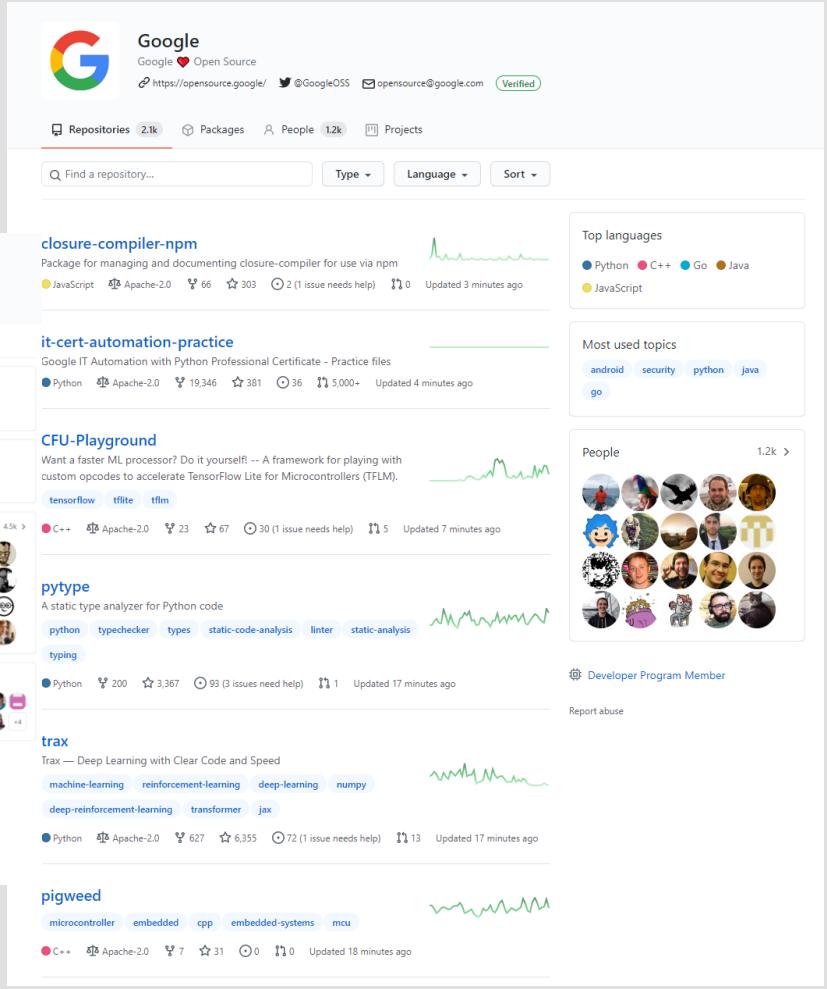
		Contributors
1	Microsoft/vscode	19K
2	facebook/react-native	10K
3	tensorflow/tensorflow	9.3K
4	angular/angular-cli	8.8K
5	MicrosoftDocs/azure-docs	7.8K
6	angular/angular	7.6K
7	ansible/ansible	7.5K
8	kubernetes/kubernetes	6.5K
9	npm/npm	6.1K
10	DefinitelyTyped/DefinitelyTyped	6.0K

1	React
2	Android
3	Node.js
4	Docker
5	iOS
6	Linux
7	Angular
8	Machine-learning
9	Electron
10	API

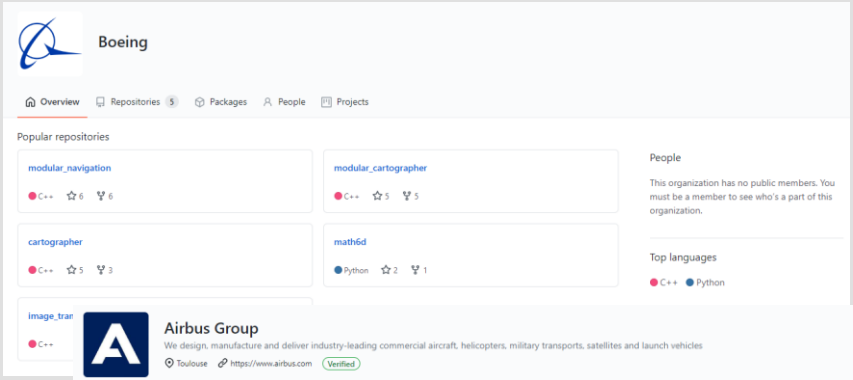
BIG GitHub Pages

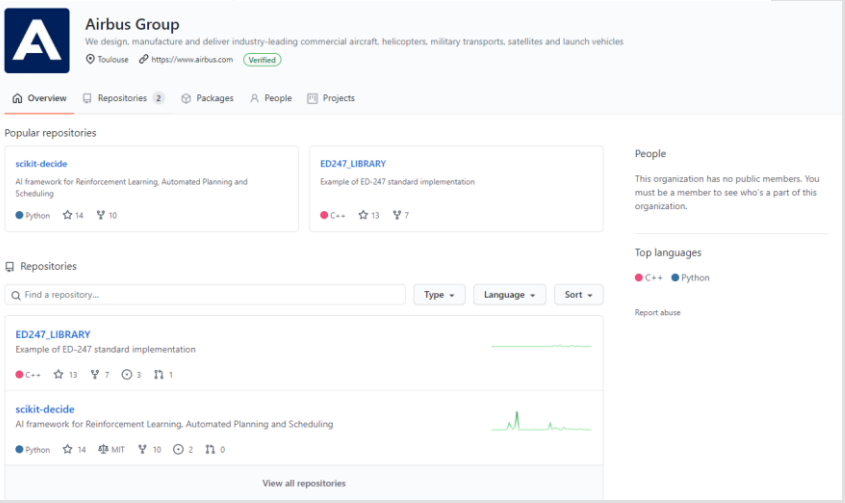


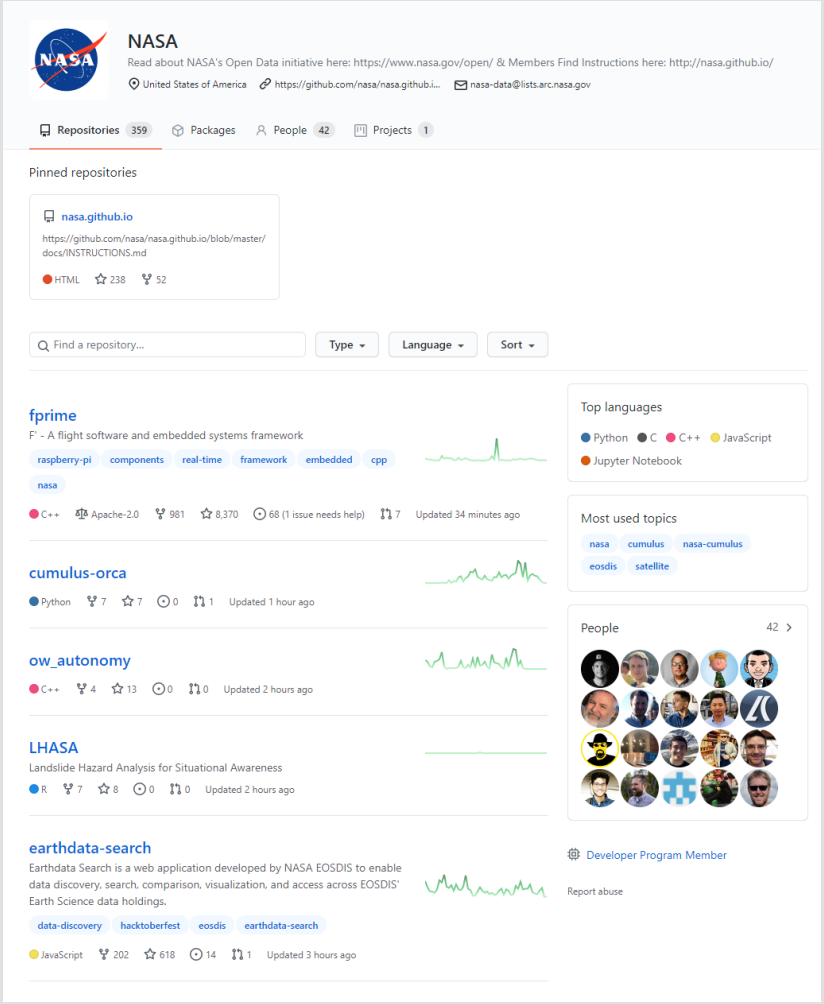




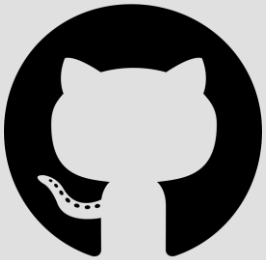
BIG GitHub Pages







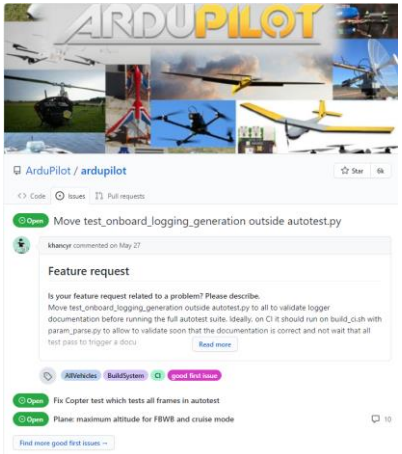
What's on GitHub?



How is it related to AAE?

Flight control softwares for UAV

Ardupilot, PX4 and more



PX4 / PX4-Autopilot ☆ Star 4.7k

<> Code ⊙ Issues Pull requests

PX4 Autopilot Software

uav drone ros px4 pixhawk uas dronecode autopilot mavlink autonomous drones dds hacktoberfest ugv mavros multicopter qgroundcontrol fixed-wing fast-rtps avoidance

Updated 19 minutes ago C++

mavlink / qgroundcontrol ☆ Star 1.9k

<> Code ⊙ Issues Pull requests

Cross-platform ground control station for drones (Android, iOS, Mac OS, Linux, Windows)

qt uav drone px4 pixhawk uas mavlink ardupilot

Updated 23 hours ago C++

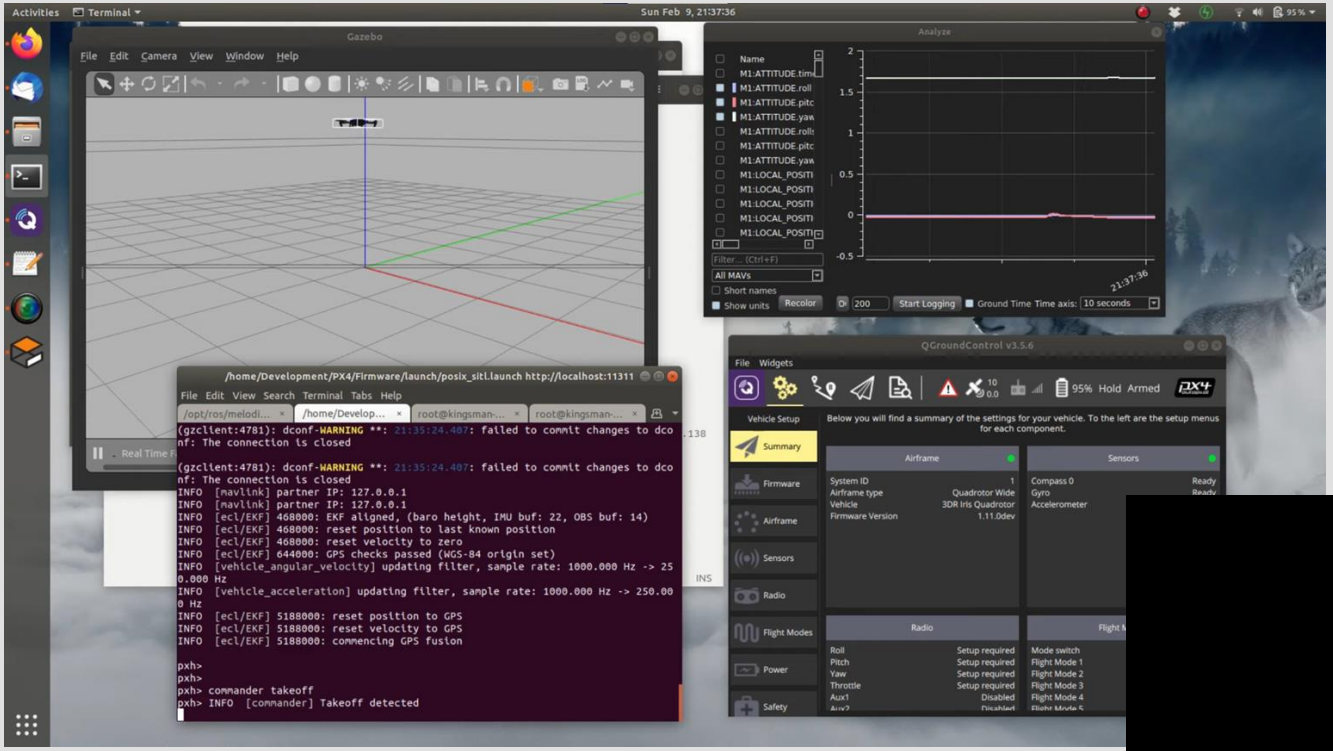
About These Softwares

Ardupilot:

- Open source software suite
- Quadcopters, VTOL and more
- Cross platform
- Over 10 years of development and improvement

PX4:

- Also open source
- Works with QGC and MAVLink (Also available in GitHub)


Activities
Terminal
Sun Feb 9, 21:37:36
Gazebo
File Edit Camera View Window Help
Analyze
Name
M1:ATTITUDE.time
M1:ATTITUDE.roll
M1:ATTITUDE.pitc
M1:ATTITUDE.yaw
M1:ATTITUDE.roll
M1:ATTITUDE.pitc
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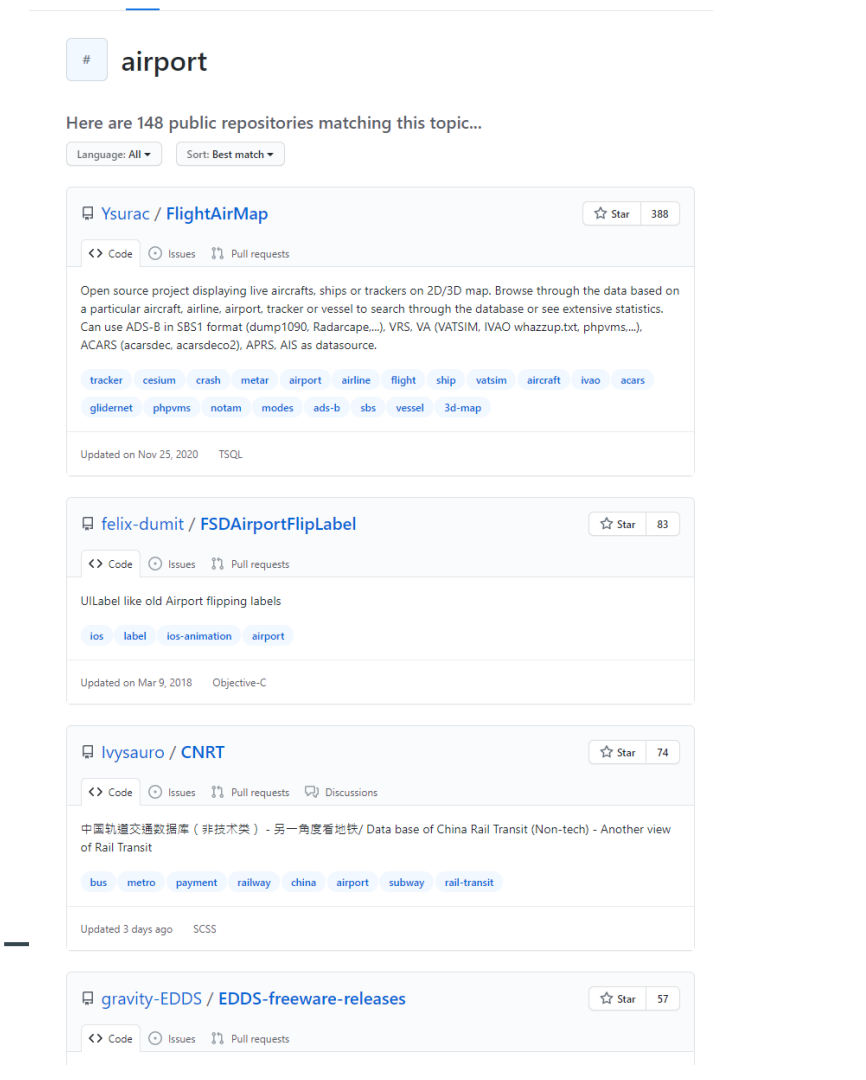
Filter... (Ctrl+F)
All MAVs
Short names
Show units
Recolor
200
Start Logging
Ground Time
Time axis:
10 seconds
2
1.5
1
0.5
0
-0.5
21:37:36
/home/Development/PX4/Firmware/launch/posix_sitl.launch http://localhost:11311
File Edit View Search Terminal Tabs Help
/opt/ros/melodi...
/home/Develop...
root@kingsman-...
root@kingsman-...
(gzclient:4781): dconf-WARNING **: 21:35:24.407: failed to commit changes to dconf: The connection is closed
(gzclient:4781): dconf-WARNING **: 21:35:24.407: failed to commit changes to dconf: The connection is closed
INFO [mavlink] partner IP: 127.0.0.1
INFO [mavlink] partner IP: 127.0.0.1
INFO [ecl/EKF] 468000: EKF aligned, (baro height, IMU buf: 22, OBS buf: 14)
INFO [ecl/EKF] 468000: reset position to last known position
INFO [ecl/EKF] 468000: reset velocity to zero
INFO [ecl/EKF] 644000: GPS checks passed (WGS-84 origin set)
INFO [vehicle_angular_velocity] updating filter, sample rate: 1000.000 Hz -> 250.000 Hz
INFO [vehicle_acceleration] updating filter, sample rate: 1000.000 Hz -> 250.000 Hz
INFO [ecl/EKF] 5188000: reset position to GPS
INFO [ecl/EKF] 5188000: reset velocity to GPS
INFO [ecl/EKF] 5188000: commencing GPS fusion
pxh>
pxh>
pxh> commander takeoff
pxh> INFO [commander] Takeoff detected
QGroundControl v3.5.6
File Widgets
95% Hold Armed
Vehicle Setup
Summary
Firmware
Airframe
Sensors
Radio
Flight Modes
Power
Safety
Below you will find a summary of the settings for your vehicle. To the left are the setup menus for each component.
Airframe
System ID 1
Airframe type Quadrotor Wide
Vehicle 3DR Iris Quadrotor
Firmware Version 1.11.0dev
Sensors
Compass 0 Ready
Gyro Ready
Accelerometer
Radio
Roll Setup required
Pitch Setup required
Yaw Setup required
Throttle Setup required
Aux1 Disabled
Mode switch
Flight Mode 1
Flight Mode 2
Flight Mode 3
Flight Mode 4

Aviation Services Engineering

Logistics and Facility Management and more



airport

Here are 148 public repositories matching this topic...

Language: All ▾ Sort: Best match ▾

Ysurac / FlightAirMap ☆ Star 388

Code Issues Pull requests

Open source project displaying live aircrafts, ships or trackers on 2D/3D map. Browse through the data based on a particular aircraft, airline, airport, tracker or vessel to search through the database or see extensive statistics. Can use ADS-B in SBS1 format (dump1090, Radarcape,...), VRS, VA (VATSIM, IVAO whazzup.txt, phpvms,...), ACARS (acarsdec, acarsdeco2), APRS, AIS as datasource.

tracker cesium crash metar airport airline flight ship vatsim aircraft ivao acars glidernet phpvms notam modes ads-b sbs vessel 3d-map

Updated on Nov 25, 2020 TSQL

felix-dumit / FSDAirportFlipLabel ☆ Star 83

Code Issues Pull requests

UILabel like old Airport flipping labels

ios label ios-animation airport

Updated on Mar 9, 2018 Objective-C

lvysauro / CNRT ☆ Star 74

Code Issues Pull requests Discussions

中国轨道交通数据库（非技术类）- 另一角度看地铁/ Data base of China Rail Transit (Non-tech) - Another view of Rail Transit

bus metro payment railway china airport subway rail-transit

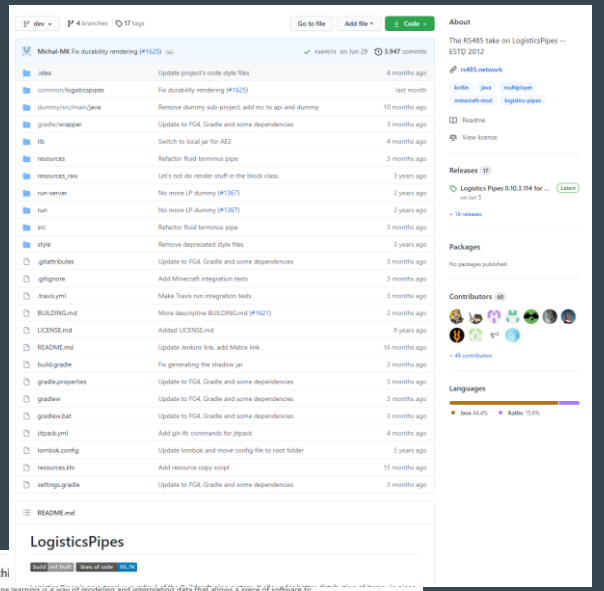
Updated 3 days ago SCSS

gravity-EDDS / EDDS-freeware-releases ☆ Star 57

Code Issues Pull requests

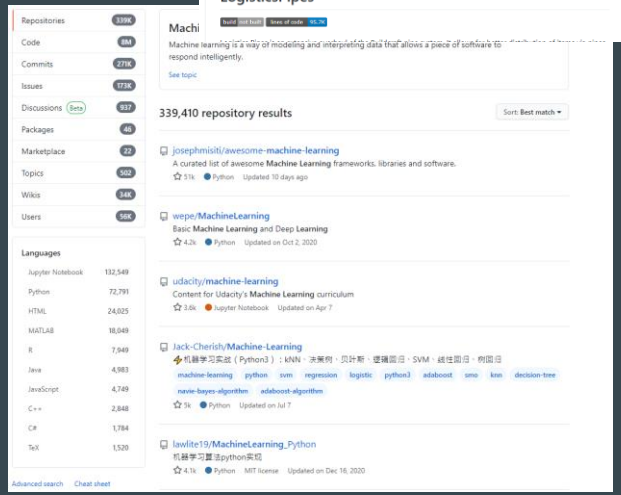
Logistics and Facility Management

- Data analysis resources
- System modelling and simulations
- Logistical models



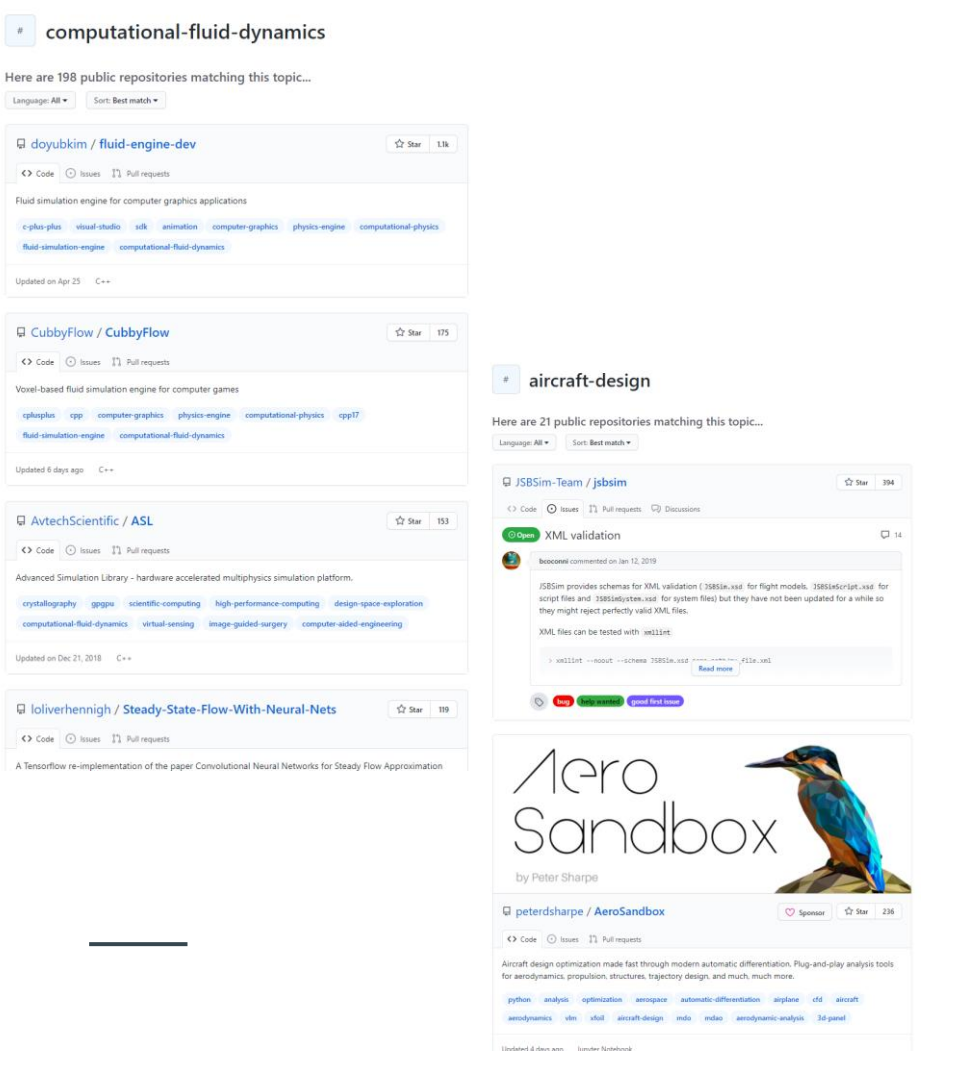
Machine learning for data analysis

- Faster analysis
- Potential extra self-learning for students
- Extremely beneficial to their careers



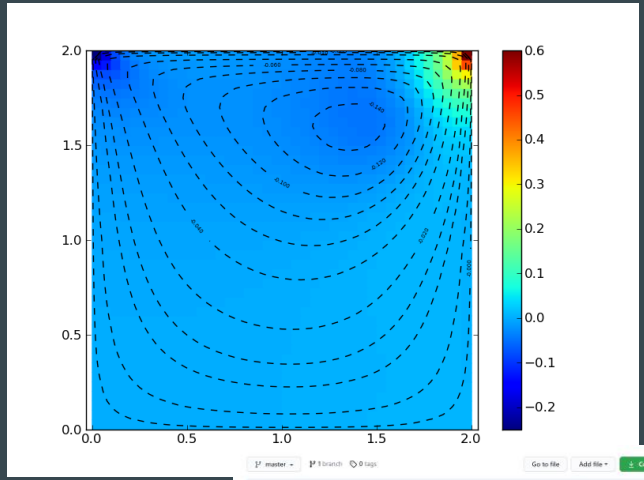
Aeronautical Engineering

Material, aircraft designs, CFD and more



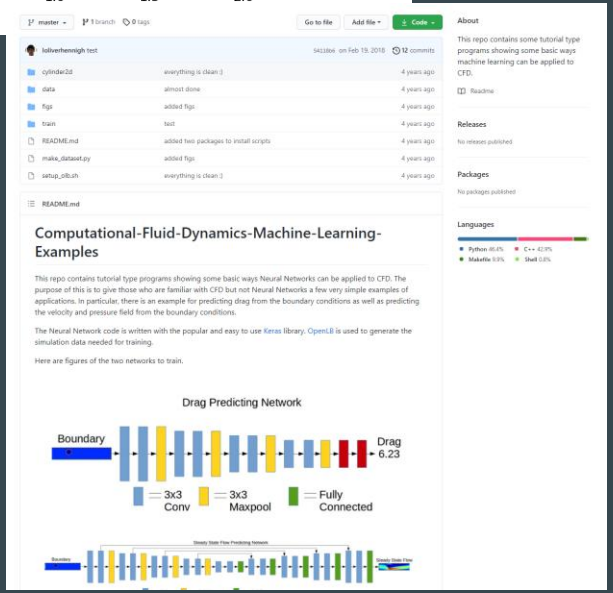
CFD Python

- Full course for CFD Python
- Course Materials (Lectures and videos)
- Software resources



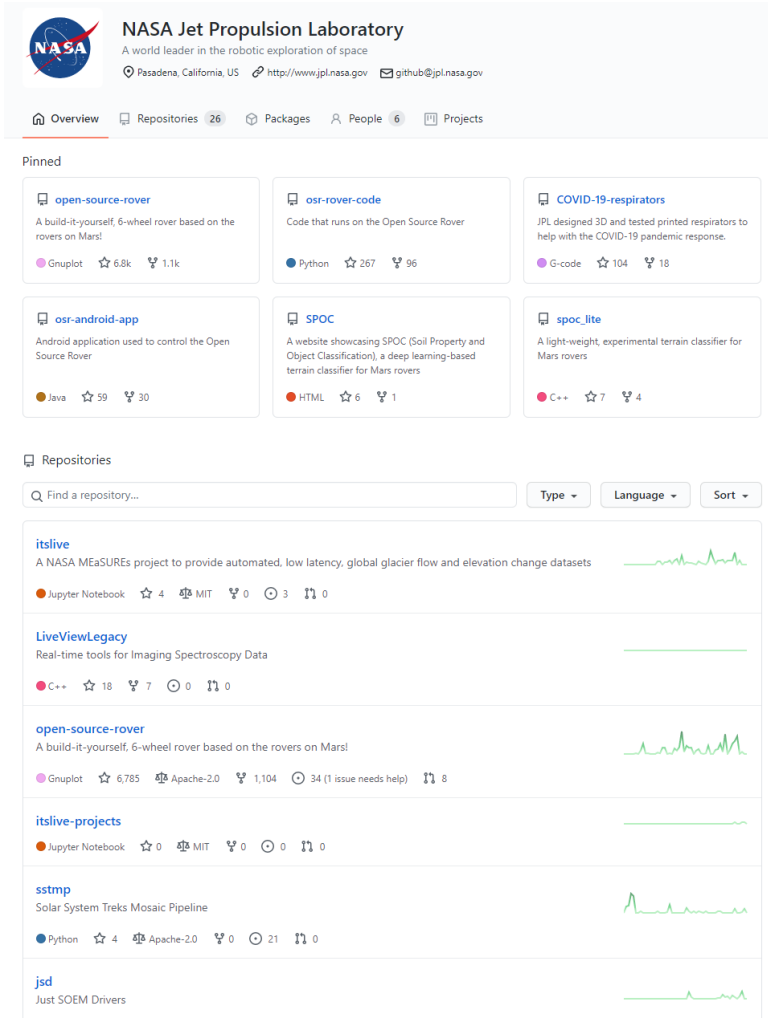
CFD and Machine Learning

- Making use of ML
- Showing how neural networks can be applied to CFD



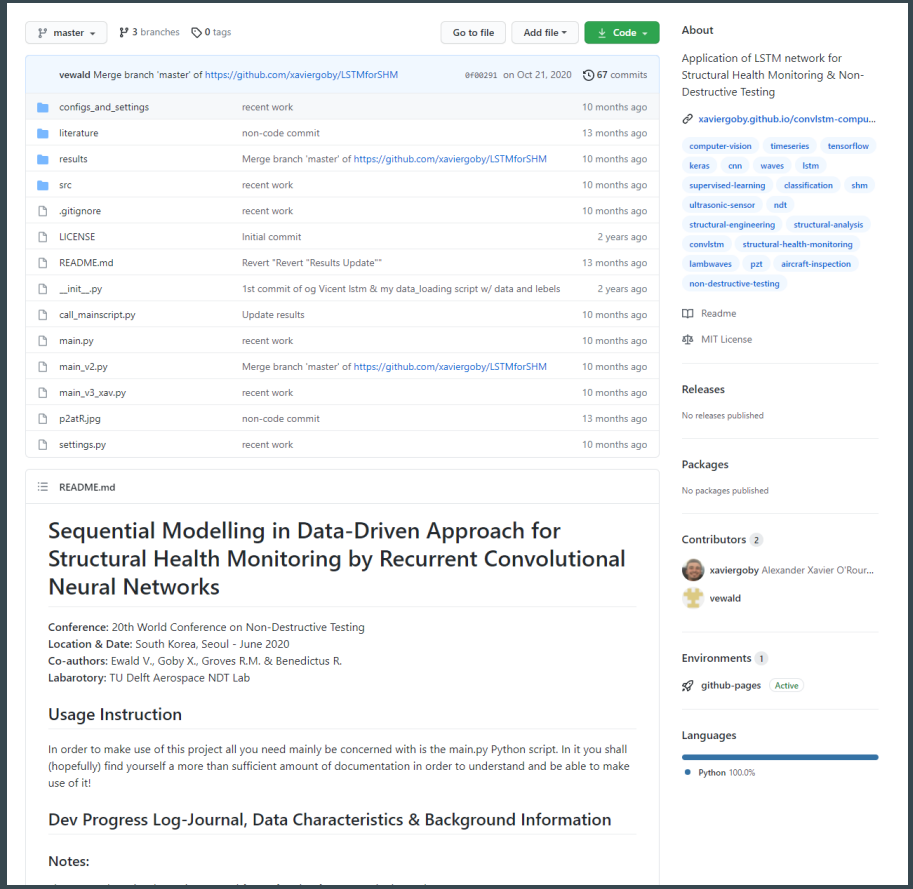
Aircraft Maintenance

Propulsion, NDT and more



Example on NDT

- Resources on the whole conference
  - 20th World Conference on Non-Destructive Testing
- Documentation and software resources
- Applying LSTM to NDT



master · 3 branches · 0 tags · Go to file · Add file · Code

vewald Merge branch 'master' of https://github.com/xaviergoby/LSTMforSHM 0f00291 on Oct 21, 2020 · 67 commits

configs_and_settings	recent work	10 months ago
literature	non-code commit	13 months ago
results	Merge branch 'master' of https://github.com/xaviergoby/LSTMforSHM	10 months ago
src	recent work	10 months ago
.gitignore	recent work	10 months ago
LICENSE	Initial commit	2 years ago
README.md	Revert "Revert "Results Update""	13 months ago
__init__.py	1st commit of og Vicent lstm & my data_loading script w/ data and lebels	2 years ago
call_mainscript.py	Update results	10 months ago
main.py	recent work	10 months ago
main_v2.py	Merge branch 'master' of https://github.com/xaviergoby/LSTMforSHM	10 months ago
main_v3_xav.py	recent work	10 months ago
p2atR.jpg	non-code commit	13 months ago
settings.py	recent work	10 months ago

README.md

Sequential Modelling in Data-Driven Approach for Structural Health Monitoring by Recurrent Convolutional Neural Networks

Conference: 20th World Conference on Non-Destructive Testing
Location & Date: South Korea, Seoul - June 2020
Co-authors: Ewald V., Goby X., Groves R.M. & Benedictus R.
Labarotory: TU Delft Aerospace NDT Lab

Usage Instruction

In order to make use of this project all you need mainly be concerned with is the main.py Python script. In it you shall (hopefully) find yourself a more than sufficient amount of documentation in order to understand and be able to make use of it!

Dev Progress Log-Journal, Data Characteristics & Background Information

Notes:

About

Application of LSTM network for Structural Health Monitoring & Non-Destructive Testing

xaviergoby.github.io/convlstm-compu...

computer-vision · timeseries · tensorflow · keras · cnn · waves · lstm · supervised-learning · classification · shm · ultrasonic-sensor · ndt · structural-engineering · structural-analysis · convlstm · structural-health-monitoring · lambwaves · pzt · aircraft-inspection · non-destructive-testing

Readme

MIT License

Releases

No releases published

Packages

No packages published

Contributors 2

xaviergoby Alexander Xavier O'Rour...

vewald

Environments 1

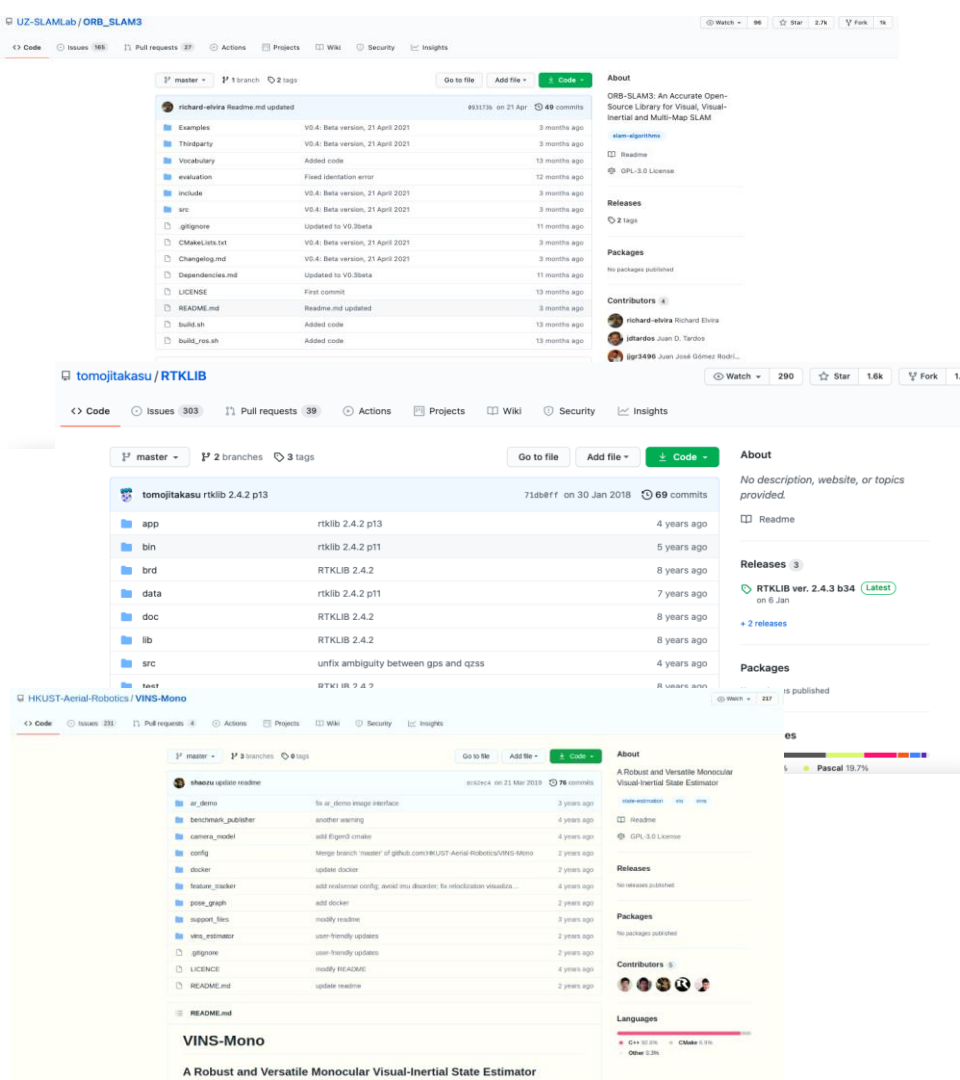
github-pages Active

Languages

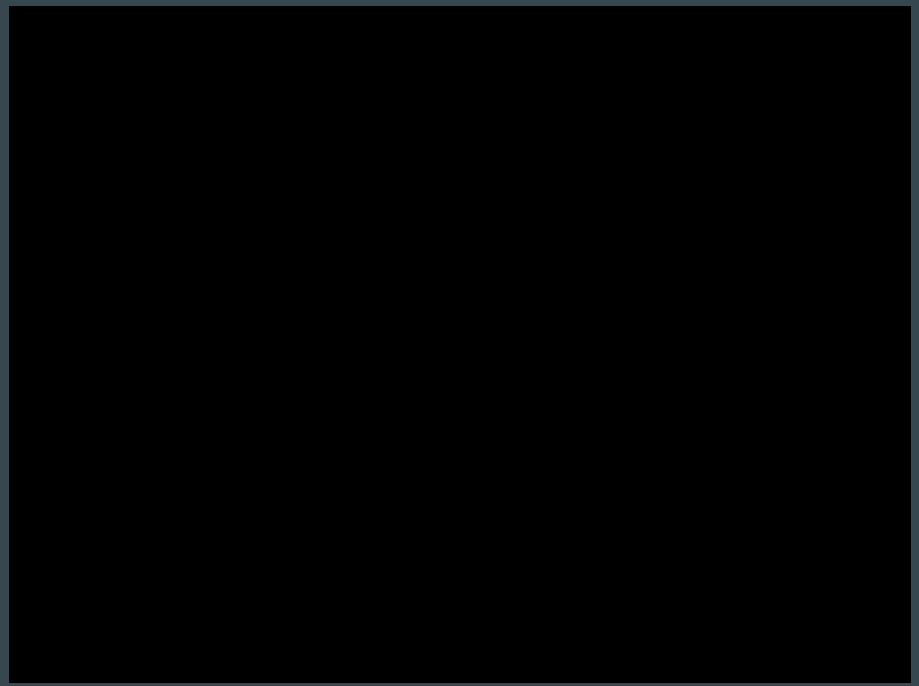
Python 100.0%

Navigation and Positioning

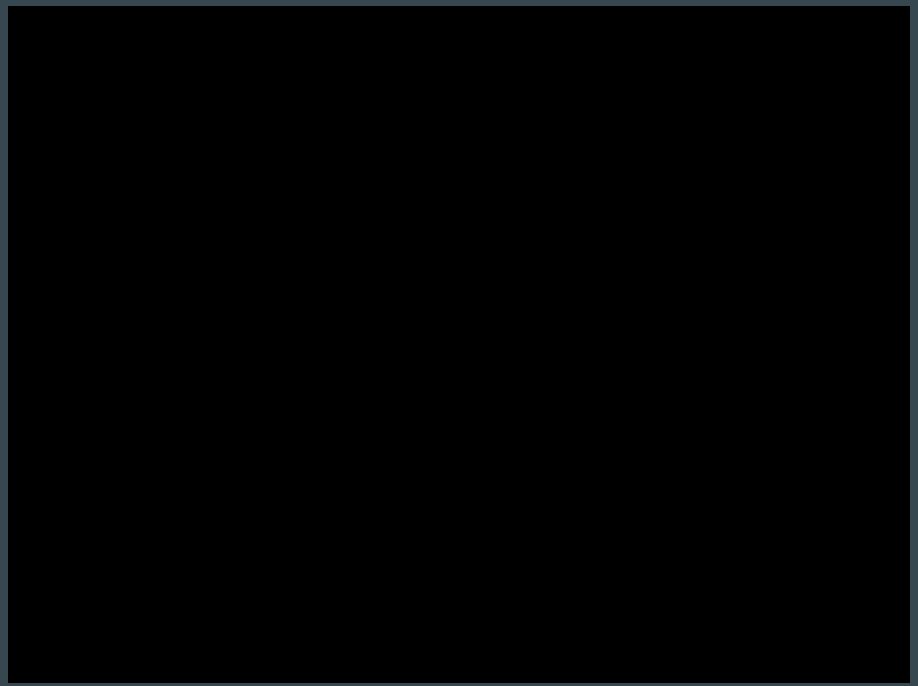
RTKLIB, VINS, ORB_SLAM3, ROS and more



Examples by our student using GitHub



Run: ORB_SLAM3



Run: VINS Mono

GitHub Facilitated Projects

Achieved using GitHub Materials

tungtungyan / FYP17 Private

Watch 1 Star 0

Code Issues 1 Pull requests Actions Projects Security Insights

main 4 branches 0 tags Go to file Add file Code

queenie-ho Update README.md ce0e17d now 51 commits

2Dmap	latest ver.	3 days ago
Demo	latest ver.	3 days ago
HDmap_layer1&2&3	latest ver.	3 days ago
HDmap_layer5	Add files via upload	3 days ago
.DS_Store	upadte	8 months ago
.gitignore	Adding exist file	8 months ago
README.md	Update README.md	

README.md

FYP17

About

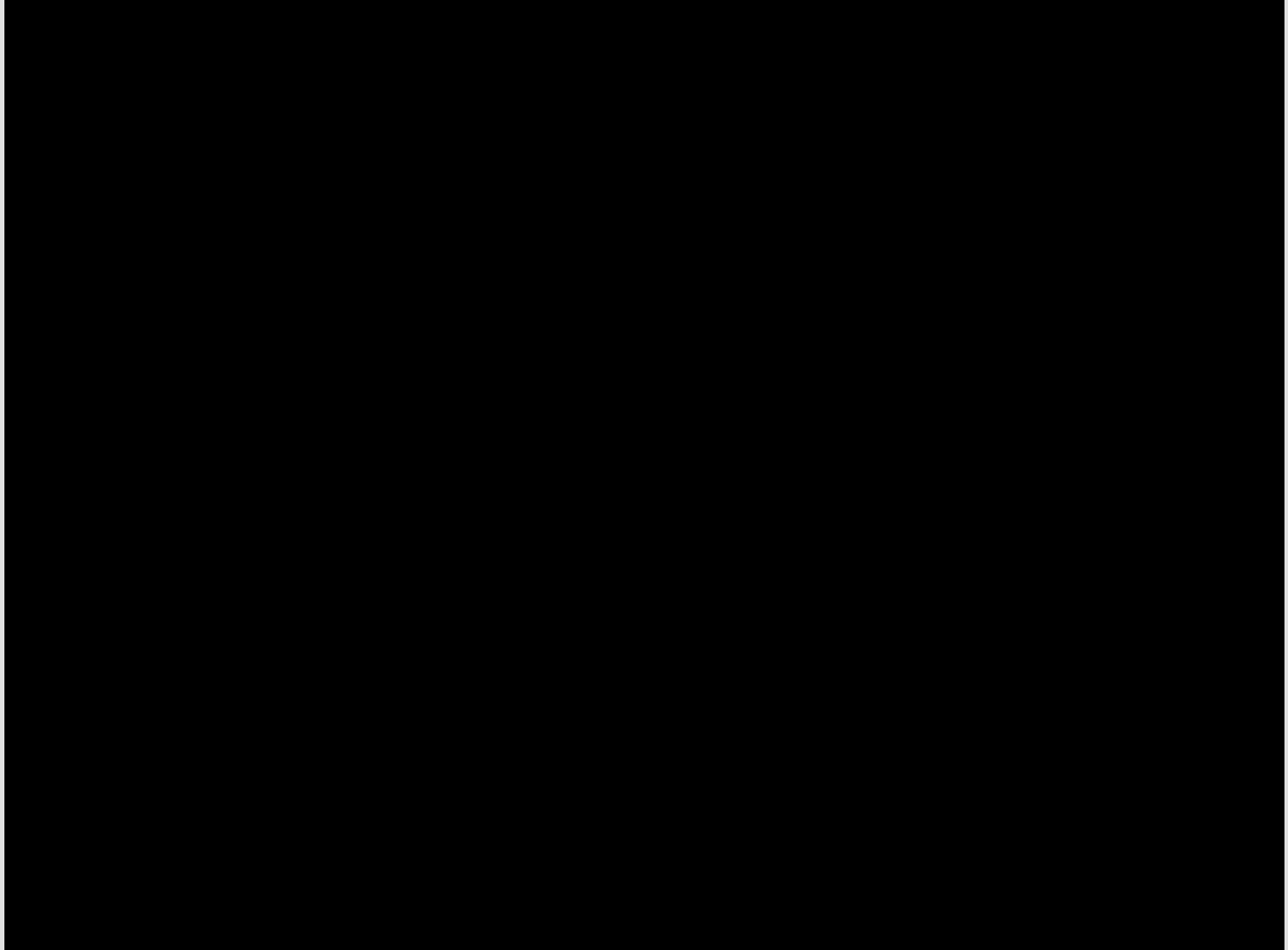
No description, website, or topics provided.

Readme

Releases

No releases published

Create a new release



Issue
Open
Moisture data sharing
What if farmers could share moisture data?!
Comment

What Will You will Learn and Experience?

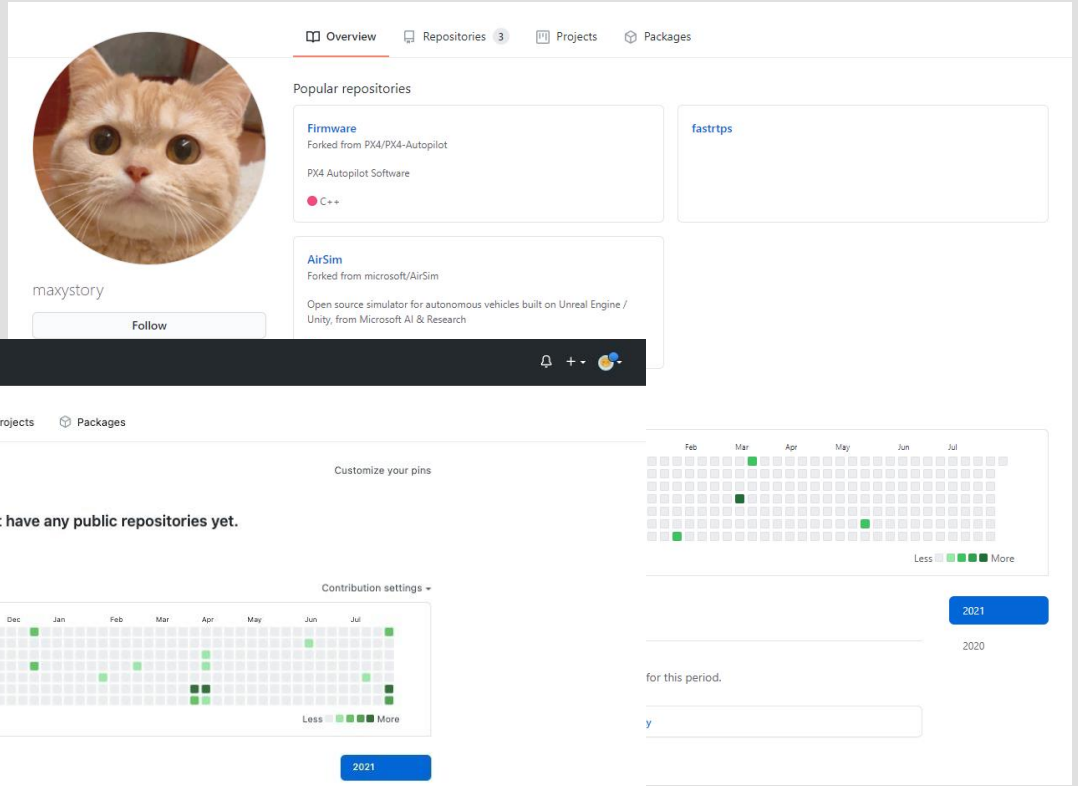
- Pull Request (Basic Features)
  - Allowing leaders to **double check** modifications done by teammates
- Code Synchronization (Version Control on Web, VS, MATLAB etc)
  - Ensuring everyone is working on the **latest** code version
- Self-learning using GitHub resources
- Look for interesting issues on GitHub

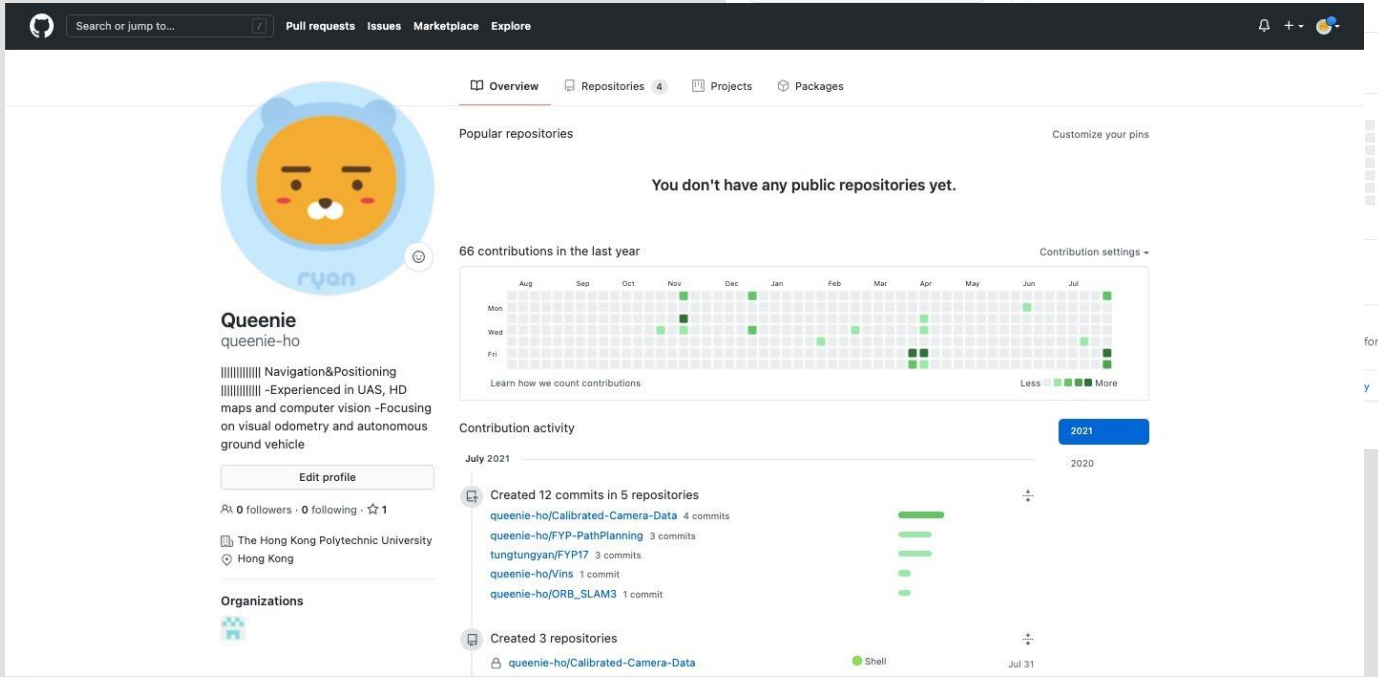
For Your Career

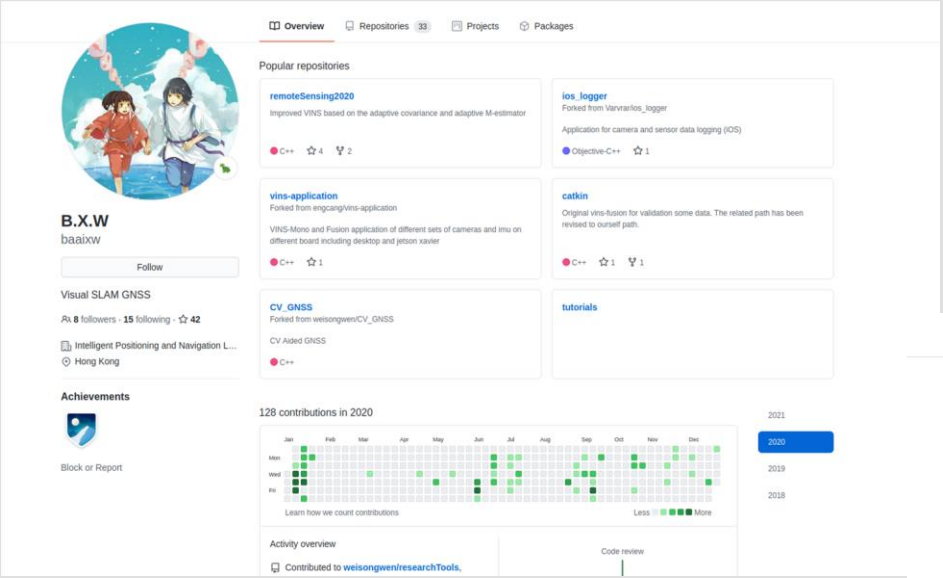
GitHub Facilitated Job Hunting

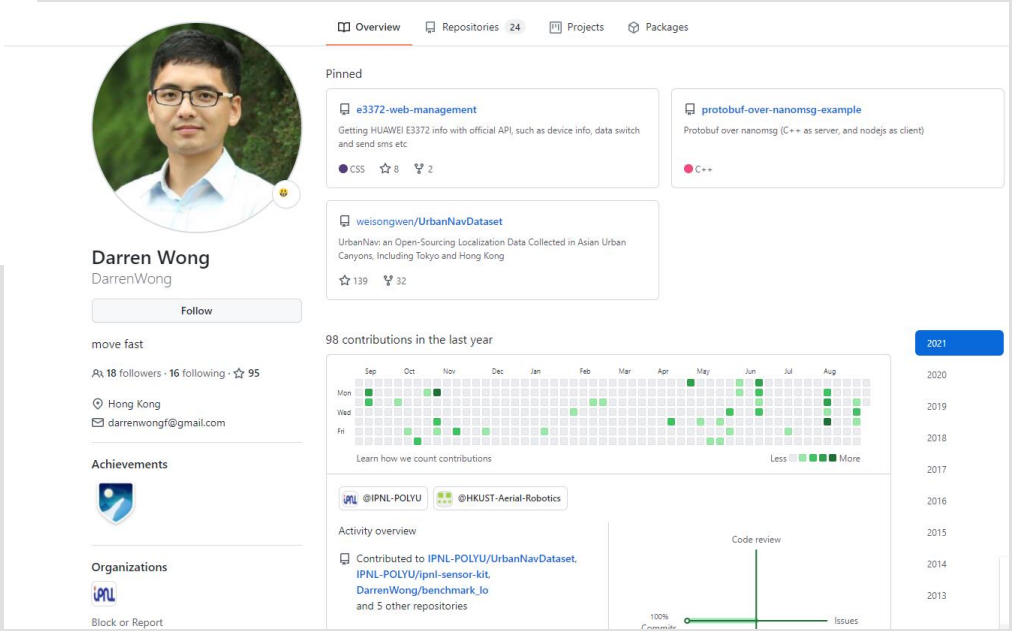
- A online digital profile for students
  - Indicating interests
  - Show past work
  - Roadmap of students' development career
- Let people know that you are looking for a job
- During job hunting
  - Better first impression
  - Better understanding
  - Appears more enthusiastic

Develop Personal Profiles Starting from AAE UG

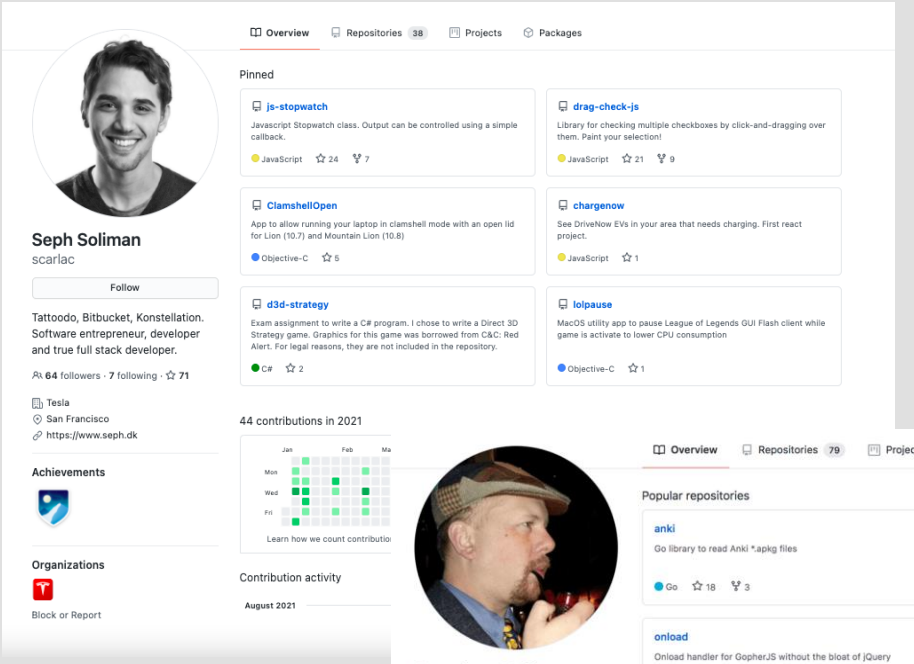


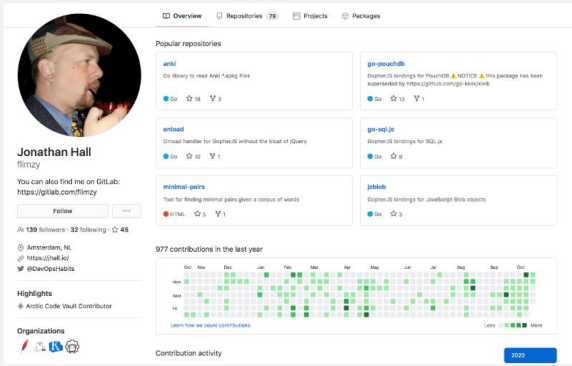


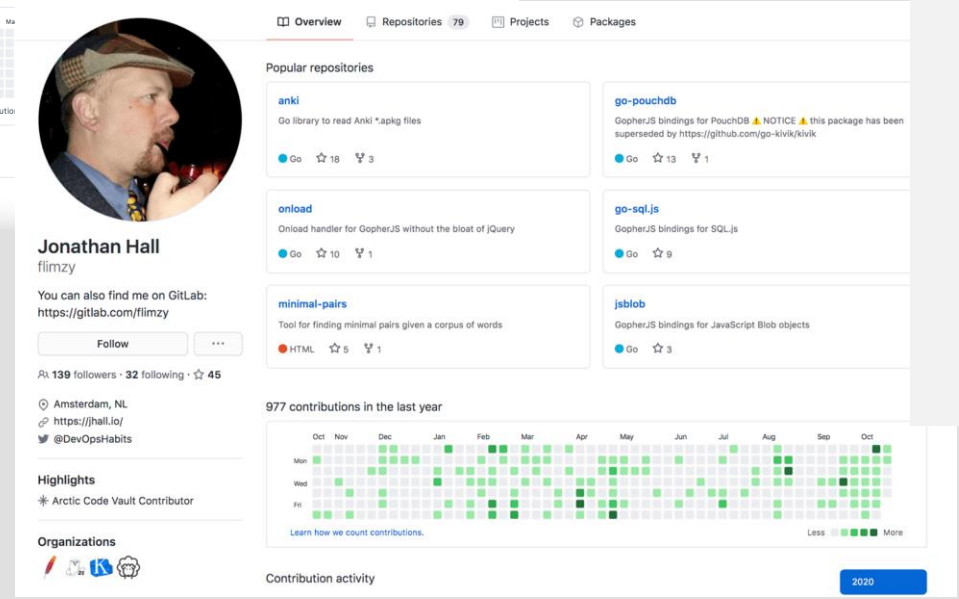




Up to Phd Studies







Making GitHub Part of your Work

Now you have an empty GitHub profile. How do you make it shine?

The following tips are roughly organized according to effort. Practically anyone can implement at least some of them. The later suggestions will be more discretionary, depending on your interests and time.

Star interesting projects

Whenever you run across a GitHub project that piques your interest, “star” it. Your starred projects appear on your public profile, and if nothing else, they provide recruiters and hiring managers an indication of what sorts of projects you find interesting.

Follow interesting people

GitHub also allows you to follow interesting people, and these people will appear on your public profile, as well. In addition to signaling to the world whom you find interesting, when people you follow make contributions to their projects, you will