

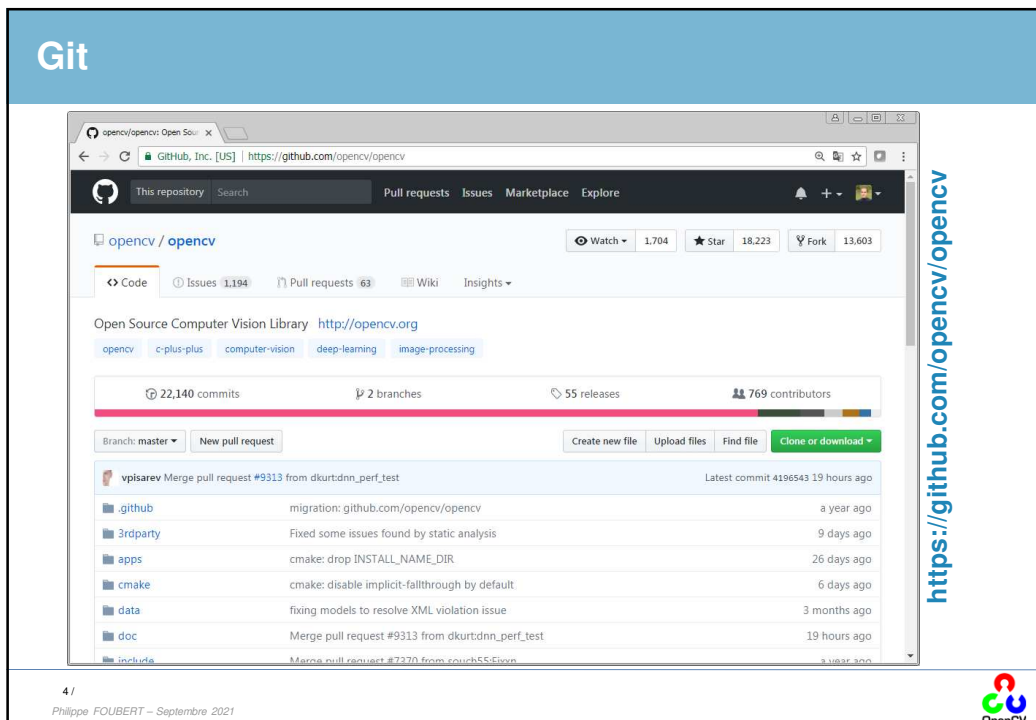
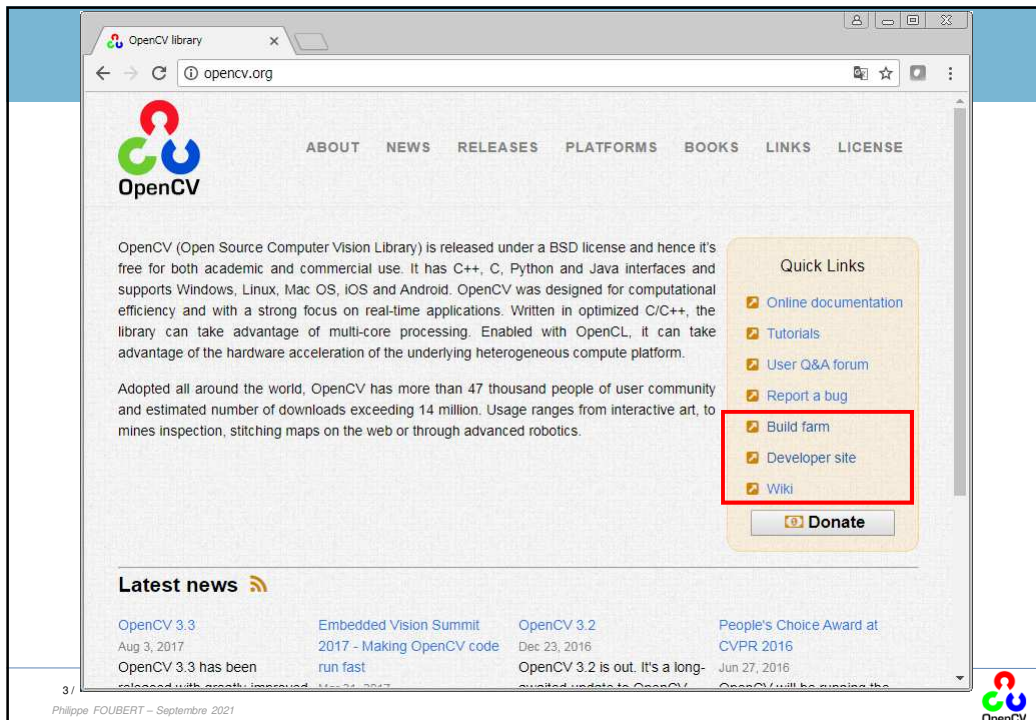


# Formation OpenCV

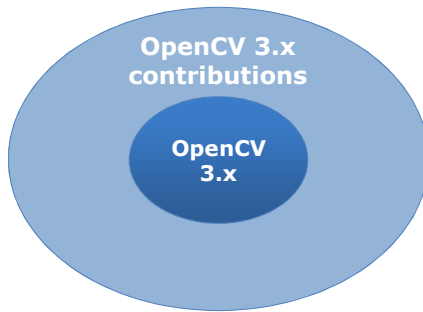
Philippe FOUBERT

## Assurance qualité





## Base / Contrib



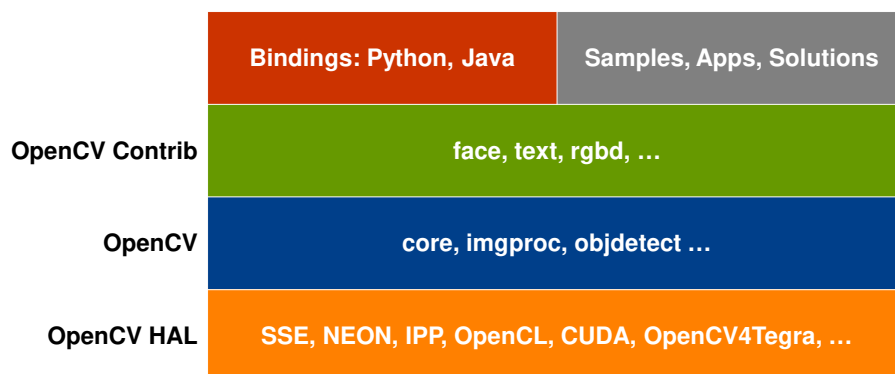
- The "main" OpenCV repository includes mature algorithms and is fully supported
- A separate contribution repository is for new computer vision algorithms that people want to share:  
[https://github.com/opencv/opencv\\_contrib](https://github.com/opencv/opencv_contrib)
- Patches to the contrib repository are tested as well by the buildbot to ensure integrity!

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## Aperçu



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## Bug tracker

The screenshot shows the GitHub Issues page for the `opencv/opencv` repository. The page header includes the repository name, a search bar, and navigation links for Pull requests, Issues, Marketplace, and Explore. Below the header, there are statistics for the repository: 1,704 Watchers, 18,223 Stars, and 13,603 Forks. The main content area displays a list of issues, with filters for 'is:issue is:open'. The issues listed include:

- Suggestion : Update wiki of deep learning** (#9645, opened 22 hours ago by stereomatchingkiss)
- Multi-page TIFF reading with imreadmulti in python returning empty list?** (category: imgcodecs, #9643, opened a day ago by ercasta)
- A possible bug in modules/highgui/src/roiSelector.cpp** (#9641, opened 2 days ago by kichang)
- OCL\_Arithm/Mul.Mat\_Scale tests failing** (#9640, opened 2 days ago by whizzkid)

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The screenshot shows the GitHub Wiki page for the `opencv/opencv` repository, titled `How_to_contribute`. The page header includes the repository name, a search bar, and navigation links for Pull requests, Issues, Marketplace, and Explore. Below the header, there are statistics for the repository: 1,704 Watchers, 18,223 Stars, and 13,603 Forks. The main content area displays the title `How_to_contribute` and the text 'Maksim Shabunin edited this page on 6 Apr - 10 revisions'. The page content includes the title `How to contribute to the OpenCV repository` and a list of pages (20).

We suppose that you've seen the `contribute` page, and now, as an enthusiastic coder, want to contribute some code. For that purpose OpenCV project now has a mirror on the GitHub, to simplify everybody's life! All the bug fixes, new functionality, new tutorials etc. should be submitted via the GitHub's mechanism of pull requests.

If you are not familiar with the mechanism - do not worry, it's very simple. Keep reading.

**Before you start contributing you should**

- Make sure you agree to contribute your code under OpenCV (BSD) license.
- If you are submitting a new algorithm implementation, do a quick search over internet to see whether the algorithm is patented or not.
- If you are going to fix a bug, check that it's still exists. This can be done by building the latest 2.4 branch or the latest master branch, and make sure that the error is still reproducible there. We do not fix bugs that only affect deprecated versions like OpenCV2.1 for example.
- Make sure that nobody beat you into fixing or reporting the issue by doing a search on the GitHub `OpenCV issues` page, and making sure that there isn't someone working on it. In the latter case you might provide support or suggestion in the issue or in the linked pull request.

The right sidebar contains a list of pages (20) including:

- Home
  - Changelog (older)
  - New functionality discussion
    - RGBD
    - Documentation improvement plan
  - Android
    - Release Notes
    - Building
  - CiteOpenCV
  - OpenCV/Logo
  - Deep Learning in OpenCV
    - DNN Efficiency
  - OpenCV 3
    - CPU optimizations
    - Profiling OpenCV
    - Applications
  - Development process
    - Hackathon
    - How to contribute
    - Coding style guide
    - Contributors

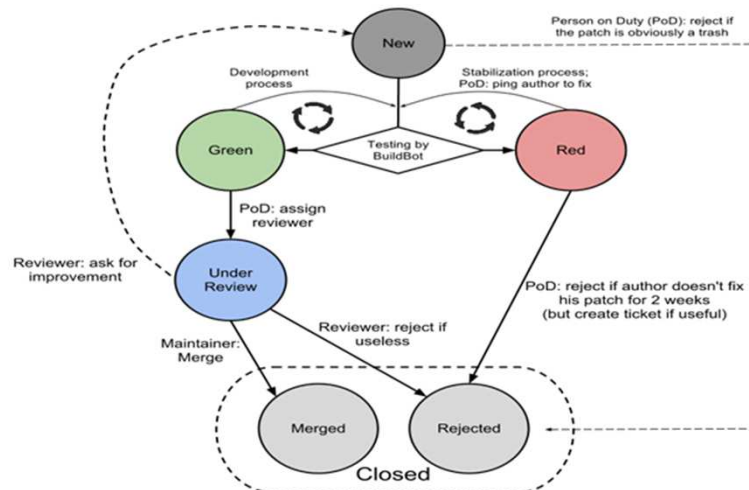
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## Contribution/patch workflow

[http://code.opencv.org/projects/opencv/wiki/How\\_to\\_contribute](http://code.opencv.org/projects/opencv/wiki/How_to_contribute)



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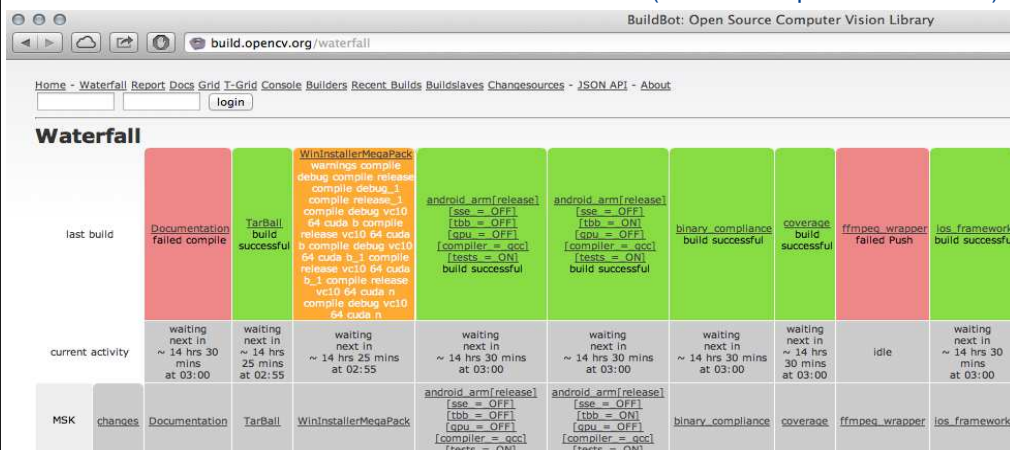
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## Waterfall

**build.opencv.org: buildbot with 50+ builders**

(buildbot: <https://buildbot.net/>)



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# Pull Request

## pullrequest.opencv.org: tests each pullrequest

Active OpenCV pull requests

[pullrequest.opencv.org/cgi-bin/requests\\_db.py?access\\_token=630badcee5eac152dfcad413de16060122592178&token\\_type=bearer](http://pullrequest.opencv.org/cgi-bin/requests_db.py?access_token=630badcee5eac152dfcad413de16060122592178&token_type=bearer)

637	master	Add Feature #2615 OpenCL module: add ocl::imshow function to display ocl::Mat using OpenCL-OpenGL interoperation.	2902 fail	2907 fail	412 fail	2779 fail	1791 fail	1863 fail	<a href="#">hewj03</a>	<a href="#">vpsarev</a> asmorkalov at 2013-03-12 10:49:34 said: Vadim, please review this request. >>	Run	Unsuccessful builds
636	master	sse2 hog	2904 fail	2909 fail	414 fail	2781 success	1793 fail	1865 success	<a href="#">ilya-lavrenov</a>	<a href="#">cuda-geek</a> taka-no-me at 2013-03-12 08:51:18 said: I thinks this request is fine now. Ilya hides hist... >>	Run	Unsuccessful builds
632	2.4	Add ocl::SURF accurate test. The test cases are ported from gpu module (masked version is still missing). Key point direction definition is synchronized with cv::SURF. nonfree module dependency is added into ocl module's cmake file.	2924 success	2929 success	434 success	2801 success	1813 success	1885 success	<a href="#">pengx17</a>	<a href="#">vpsarev</a> at 2013-03-14 19:52:44 said: +1: >>	Run	Merge
631	2.4	Add ocl::stereoBM function	2913 success	2918 success	423 success	2790 success	1802 success	1874 success	<a href="#">bitwangyaoyao</a>	<a href="#">vpsarev</a> at 2013-03-14 19:59:48 said: +1: >>	Run	Merge
627	2.4	Enable use_host_ptr and copy_host_ptr when creating oclMat with Mat	2859 success	2863 success	365 success	2731 success	1744 success	1819 success	<a href="#">bitwangyaoyao</a>	<a href="#">vpsarev</a> taka-no-me at 2013-03-11 19:17:01 said: This change is not binary compatible. Lets preserv... >>	Run	Assignee not approved
619	2.4	Add another ocl sample program, a little tweak to ocl::facedetect sample Switch on setbinpath by default in ocl::facedetect sample. This can save the kernel compiling time from the 2nd time you run.	2810 success	2813 success	312 success	2681 success	1693 success	1766 success	<a href="#">bitwangyaoyao</a> <a href="#">vpsarev</a>		Run	Assignee not approved

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## Test Suite

- GoogleTest-based + set of Python scripts
- Thousands of unit tests
- Accuracy tests
- Performance tests

```
[ RUN ] 1 test from Core_MeanStdDev/ElemWiseTest
Core_MeanStdDev/ElemWiseTest.accuracy@0
Core_MeanStdDev/ElemWiseTest.accuracy@0 (1518 ms)
[ OK ] 1 test from Core_MeanStdDev/ElemWiseTest (1518 ms total)

[ RUN ] 1 test from Core_Sum/ElemWiseTest
Core_Sum/ElemWiseTest.accuracy@0
Core_Sum/ElemWiseTest.accuracy@0 (778 ms)
[ OK ] 1 test from Core_Sum/ElemWiseTest (778 ms total)

[ RUN ] 1 test from Core_Norm/ElemWiseTest
Core_Norm/ElemWiseTest.accuracy@0
Core_Norm/ElemWiseTest.accuracy@0 (2824 ms)
[ OK ] 1 test from Core_Norm/ElemWiseTest (2824 ms total)

[ RUN ] 1 test from Core_MirMaxLoc/ElemWiseTest
Core_MirMaxLoc/ElemWiseTest.accuracy@0
Core_MirMaxLoc/ElemWiseTest.accuracy@0 (540 ms)
[ OK ] 1 test from Core_MirMaxLoc/ElemWiseTest (540 ms total)

[ RUN ] 1 test from Core_CartToPolarToCart/ElemWiseTest
Core_CartToPolarToCart/ElemWiseTest.accuracy@0
Core_CartToPolarToCart/ElemWiseTest.accuracy@0 (4007 ms)
[ OK ] 1 test from Core_CartToPolarToCart/ElemWiseTest (4007 ms total)

[ Global test environment tear-down ]
143 tests from 98 test cases ran. (225800 ms total)
[ PASSED ] 143 tests.
```

```
python ../modules/ts/misc/summary.py core*.xml -f "add:.*C4" -u s
```

Geometric mean			
Name of Test	core posix x64 6693M 2011-09-08--13-13-41	core posix x64 6695 2011-09-08--13-30-06	core posix x64 6695 2011-09-08--13-30-06 vs core posix x64 6693M 2011-09-08--13-13-41
core_arithm_add::Size_MatType::(127x61, 8UC4)	0.000 s	0.000 s	1.00
core_arithm_add::Size_MatType::(1280x720, 8UC4)	0.004 s	0.004 s	0.99
core_arithm_add::Size_MatType::(1920x1080, 8UC4)	0.009 s	0.009 s	1.02
core_arithm_add::Size_MatType::(640x480, 8UC4)	0.001 s	0.001 s	1.00