

# Semestral project presentation OpenCV

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A4M35OSP Open Source programming

11/03/2012

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## My contribution

Hierarchical MSER

Android Camera Configuration API

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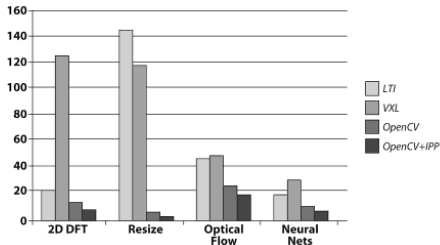
## Bibliography

- Open Source Computer Vision
- Started at Intel in 1999 [3]
- From 2008 Willow Garage actively supports the development
- BSD license





- C, Cpp, Python (+ Java, C#) interfaces + GPU
- Multiplatform support (Win, Linux, Android)
- [1]



**Description**

Test station: Pentium M, 1.7GHz

Libraries: OpenCV 1.0pre, IPP 5.0, LTI 1.9.14, VXL 1.4.0

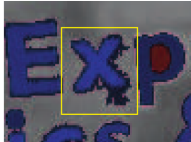
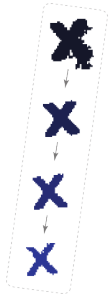
2D DFT: Forward Fourier Transform of 512x512 image

Resize: 512x512->384x384 bilinear interpolation, 8-bit 3-channel image

Optical flow: 520 points tracked with 41x41 window, 4 pyramid levels

Neural Net: mushroom benchmark from FANN

- Originally developed at Intel by Gary Bradski, joined by Vadim Pisarevski
- Several people from original team ended up in Willow Garage which became the main coordinating company [2]
- [SVN](#), [Issue Tracker](#)
- [Wiki](#), [Users Group](#), [Documentation](#), [Source Forge page](#)
- [Andoird OpenCV group](#)



Issue




```
CV_CAP_PROP_ANDROID_FLASH_MODE  
CV_CAP_PROP_ANDROID_FOCUS_MODE  
CV_CAP_PROP_ANDROID_WHITE_BALANCE  
CV_CAP_PROP_ANDROID_ANTIBANDING  
CV_CAP_PROP_ANDROID_FOCAL_LENGTH  
CV_CAP_PROP_ANDROID_FOCUS_DISTANCE_NEAR  
CV_CAP_PROP_ANDROID_FOCUS_DISTANCE_OPTIMAL  
CV_CAP_PROP_ANDROID_FOCUS_DISTANCE_FAR
```



## API to enumerate camera

- NumberOf
- Name of each camera
- Resolution of each camera

# Bibliography

-  [G. Bradski and A. Kaehler.](#)  
*Learning OpenCV: Computer Vision with the OpenCV Library.*  
O'Reilly, Cambridge, MA, 2008.
-  [W. Garage.](#)  
Opencv, 2012.  
[Online; accessed 11-March-2012].
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Opencv — Wikipedia, the free encyclopedia, 2012.  
[Online; accessed 11-March-2012].