i-vizon trunk

Code Area 89!
A warm welcome to my code base :)

I'm learning how effectively we can use the available computing units on the embedded platform.

In my exploration phase, I have written some C++ wrappers for ease of use and also given some
tips where ever possible under the tag @TIPS:

For newbies out of college, I hope this will be a good starting point.

I have tried to introduce as many tools/libraries I can, to make
an end to end solutions.

Willing to contribute or any queries
reach me at mageswaran1989@gmail.com with subject "i-vizon:OpenCL"

Folder Structure:

```
common  :       Common headers
utils   :       System utilities
docs    :       My notes
opencl  :       Wrappers and try outs
gles    :       Wrappers and try outs
pcl     :       Wrappers and try outs
linux   :       Wrappers for linux APIs
c++11   :       For newbies
data    :       All data file needed for the exercises
```

General Structure:

```
library_name/
        wrappers/
                inc/
                src/
                *.pri
        1.hello_world
                Qt/
                        hello_world.pro
                hello_world.cpp
        2.exercise_two
        3.exercise_three
        4.exercise_four
        5.exercise_five
```

Naming Convention Followed:

Point Cloud C++ coding guide lines

FileNames:

file_*name*_one.h/.cpp

Compiler and IDE used:

gcc (Ubuntu/Linaro 4.6.3-1ubuntu5) 4.6.3
QtCreator 2.8.1

Software Libraries/SDKs Used:

1.OpenCL 1.1/1.2
2.OpenMP 3.0
3.OpenCV 2.4.8
4.Boost 1.54
5.Qt 4.8.0
6.PCL 1.7
I will leave the installation guide to Google.

Important:
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Code base is still in pre release stage, will take another few months to freeze the wrappers!
Right now it is upto you to explore the wrappers, till I generate Doxygen files.

ASSUMPTIONS:
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*You are familiar with linux environment
*You know to use QtCreator for C++ projects
*Git is cloned in /opt/i-vizon/trunk

To Start:
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1.Open the *.pro file using QtCreator and configure the output folder location.
2.In qtcreator press Ctrl+5 and under "Build Steps" add CONFIG+=linuxPC in "Additional Arguments" section
3.If you have libraries already installed, its time to RUN and explore :)