Team meeting report 15/03/2019

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Planning for the meeting:

See what everyone did.

Use the knowledge of the CIA students to remake a project on visual studio with openCV to create the GUI.

Plan what we will be doing from what we have already done

What we were supposed to do:

- Suleyman and Anwar needed to work to detect the bubbles on the edge of the image.
- Suleyman was also supposed to work on implementing the code with GPUs, with CUDA.
- Geoffroy and Patricia were supposed to use openCV on Qt to use the droplet detection program and get the cmd parameters with the user input in the GUI created.

What has been done:

- Suleyman and Anwar have worked on improving the detection of the bubbles: they tried to calculate a truncated circle (one that is on the edge of the image). They have used the RANSAC method, which is more accurate but slower.
- Anwar has also used a filter to remove some noise from the image so that the droplet detection is easier.
- Suleyman has also worked on the CUDA implementation of the code.
- Geoffroy and Patricia were not able to use openCV on Qt because of multiple errors. Because of that they used Windows form on Visual Studio instead. They need to setup the program with opencV on this new project.

What needs to be done:

Suleyman: Get CUDA to work on the project with CMake.

Suleyman and Anwar: Improve the detection of the bubbles on the edges which is rather inaccurate for now.

Anwar: Improve the filter on the image because it still detects some of the noise as droplets. Geoffroy and Patricia: Setup the openCV program on Visual Studio with Windows form. Be able to use the program with Windows form. Use the user input to replace the cmd parameters. Implement the GUI as was described in the presentation. We need to merge openCV display on a Windows form. It can be on a new window but we would prefer to put it directly on an existing UI with buttons.

Planning for the future meetings:

We have assignments so the next meetings will be on the 27/03 and 03/04.