

Evaluation software

The evaluation software for both segmentation (SEG) and tracking (TRA) accuracy is written in C++ and released as two command line executables to help the participants with the self-evaluation and refinement of their algorithms during the training period. The same routines will be used to evaluate the submitted results in the competition phase of the challenge. The executables can be run on several Windows, Linux, and Mac platforms and require two input parameters:

- **dir** – Path to a dataset directory (e.g., Fluo-C2DL-MSC),
- **seq** – Sequence identifier (e.g., 01).

After specifying both parameters, each routine returns the value of a particular measure on the standard output, and creates a log file (either **SEG_log.txt** or **TRA_log.txt**) in the directory with evaluated results. Note that the software requires the evaluated results to be saved in the format as described in the file "Naming and file content conventions.pdf". To verify proper functionality of the software, the provided testing directory (the subdirectory "**testing_dataset**") can be used. It contains a ground truth and some results for three sequences:

- 01 – Example of 2D results for the sequence 01 from the Fluo-C2DL-MSC dataset,
dir=testing_dataset, **seq**=01, SEG measure: 0.232874,
- 02 – Example of 3D results for the sequence 01 from the Fluo-C3DL-MDA321 dataset,
dir=testing_dataset, **seq**=02, SEG measure: 0.443686,
- 03 – Image data that corresponds to the final example in the file "TRA.pdf",
dir=testing_dataset, **seq**=03, TRA measure: 0.630162.

Windows users

The 32-bit executables for Windows users can be found in the subdirectory "**Win**". They were dynamically built using the latest version of the Microsoft Visual Studio C++ Compiler 2012. All mandatory dll files are provided in the same subdirectory as well. The software was tested on workstations running Windows 7 and Windows 8 operating systems.

Linux users

The 64-bit executables (statically linked ELF 64-bit LSB executable) for Linux users can be found in the subdirectory "**Linux**". They were statically built using the Gentoo GCC-4.6.3 compiler. The software was tested on workstations running Ubuntu 12.04, Fedora 17, and Gentoo Linux operating systems.

Mac users

The 64-bit executables for Mac users can be found in the subdirectory "**Mac**". They were dynamically built using the Apple LLVM-5.1 compiler. The software was tested on workstations running Mac OS X 10.9 operating systems.