DICT_HW

This is CUDA-optimized version of *Digital Image Correlation and Tracking* application developed by Christoph Eberl, Robert Thompson, and Daniel Gianola. DICT is used to calculate strain fields in structures or structural materials using a series of consecutive images with sub pixel resolution independent of physical size of the samples, see for details. Original version and sample data are available from Matlab Central. Please, read application tutorial for installation and usage instructions.

The version distributed here is using modern NVidia graphic cards to accelerate computations. The image correlation code is completely rewritten using CUDA and released as a C library. The stand-alone console application and MATLAB plugin are provided to perform correlation. Both are tested and working under Linux and Windows. The expected speed-up exceeds 10 times.

The sources are available trough the bazaar repository; pre-compiled binaries for Windows are available as well. You may issue following command to fetch the latest revision from the repository:

```
bzr checkout http://dside.dyndns.org/bzr/normxcorr/trunk/
```

Publications

- Poster presented at NVIDIA GPU Technology Conference 2010