(211) CultLab 3d

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Link(s): http://cultlab3d.eu

CultLab3D, the world-wide first attempt at 3D mass digitization, implements a multi-modular scanning pipeline connecting individual scanners by conveyor belts and transporting cultural heritage artefacts on corresponding trays.
The main goal of this project is to make 3D digitization of entire collections affordable while achieving high quality results, so models can be used from scientific validation to publicity over the web. While the main idea is to support a multitude of scanning devices, CultLab3D has focused on implementing a photogrammetric scanning pipeline first, able to capture the geometry, texture and the optical material properties of artefacts.
In its current state, CultLab3D uses a full photogrammetric pipeline, differently from a previous version exhibited at Digital Heritage 2013. This has the advantage that the 3D reconstruction process is simplified because no data fusion from different scanning technologies is needed, allowing a fully functional 3D mass digitization pipeline.
CultLab3D or similar concepts are enabling technologies for tomorrow's digital societies, making 3D digitization in general more affordable and fostering innumerous applications in the area of cultural heritage allowing museums to develop new innovative, self-supporting, economic concepts around digitization, visualization and replication of cultural heritage artefacts.