

Sensing data from ancient coins, pottery fragments and archaeological manuscripts.

PD Dr. Martin Kampel

Vienna University of Technology

A major obstacle to computer aided documentation of cultural heritage objects is the extent of manual intervention needed. Such interventions are currently massive and exist throughout every phase of a documentation project: collection of images, image management, establishment of sensor position and image orientation, extracting the geometric detail describing an object, merging geometric, texture and semantic data. In order to get digital data from archaeological objects like coins, documents or pottery different sensing techniques have to be applied: 2D image acquisition or highly detailed 3D scanning for numismatic documentation, 3D scanning and 3D reconstruction for recording archaeological pottery and multispectral imaging for the preservation, analysis and restoration of (damaged) written sources. This talk describes acquisition techniques and general requirements for the archaeological objects mentioned. Experiments and results are given on real archaeological data.