

# Textilmuseum St.Gallen

## Use case 8 Textile Museum St. Gallen Collection

### Description

The museum holds one of the most important collections of textiles in Switzerland with approximately 56000 objects, among which are Eastern Swiss embroideries, Egyptian textiles from late antiquity, European lace, embroideries and fabrics from the Middle Ages to the present day. The collection of historic lace is among the world's most significant. It consists of about 6,500 samples of the most important centres of European lace production such as Italy, the Netherlands, Belgium, Germany and France, from the period spanning the 16th to early 20th century. Among the embroidery holdings are impressive European picture embroideries from the 14th to 16th century, while the hand-made white embroidery as well as machine embroidered products trace the history of the embroidery industry of Eastern Switzerland in the 19th and 20th century. The famous collections of Leopold Iklé (1838-1922) and John Jacoby (1869-1953) laid the foundations for the museum's collection and form the main focus of this project.

### Object categories

(i) Fragments - incomplete flat pieces or swatches/samples of lace (6,500), (ii) complete 3d elements of costume executed using lace technique (3000) and (iii) oversized textiles (1000)

### Challenges

Lace, both hand-made and machine-made, is very fine in scale, making their investigation - identification of structures and dating, as well as their presentation and visualisation very challenging. Lace is often monochrome, being executed only in white or ecru thread, and is seemingly flat (although not flat in structure), and textured, making the investigation, interpretation and visual appreciation challenging. Oversized wall tapestries (embroidered, lace, or woven) are difficult to access due their size, while they are very rich in small detail.

### Technical description

Our main current goal is to make the collection more accessible for different users of the collection, while ensuring its long-term preservation. On-line delivery is one of the options, and we are looking to convey the textured and three-dimensional surface of lace by RTI. Enabling the user to re-light the 'digital object' on the screen will create an active experience of object examination. This is to be combined with a zoom facility for a detailed investigation, providing a useful mode of investigation and presentation. Elements of costume such as collar, cuffs and head-dress (e.g. 17th century fontange) are often multilayered,

gathered and structured to shape. They are difficult to present in the appropriate 3-dimensional shape because of their fragile condition, and are often stored flat. We are looking to create a three-dimensional 'digital object' to convey the shape and the construction of the garment, as well as to capture surface details that can be viewed and explored online. Automation of the digitization process is especially valuable for the oversized textiles. UAVs will be deployed to accurately scan oversized textiles without having to move them from their exhibition positions. Emphasis will be placed on scanning the oversized textiles with constant GSD, but also to be able to focus on specific areas of interest that have been identified by human conservator or from TEXTaiLES degradation analysis engine.