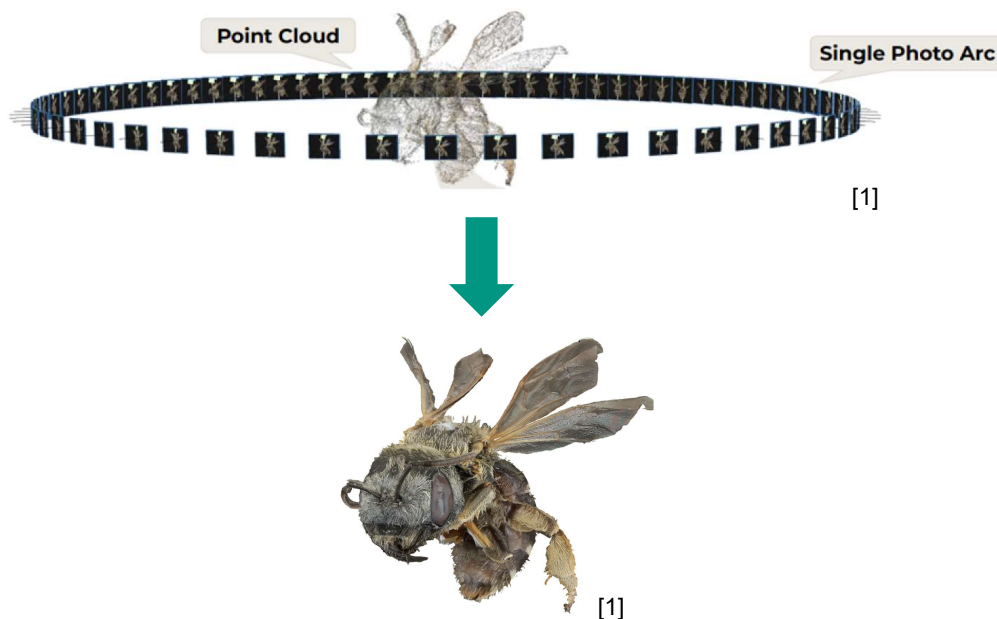




Master's Thesis

Development of an automated system for 3D reconstruction

3D reconstruction is used in many fields to analyze and digitize small objects. A widely used method of 3D reconstruction is photogrammetry, in which images are taken from different perspectives to obtain a 3D model. Within the scope of the thesis, existing systems should be further developed to automatically take multi-perspective images of small biological samples and convert them into a 3D model.



Tasks:

- Researching the state of the art
- Concept development and technical implementation
- Performing tests and evaluating the design

Education, experience and skills:

- High motivation and ability to work independently
- Experience with Python
- CAD knowledge (Creo Parametric)
- Thesis can be written in English or German

[1] <https://escholarship.org/uc/item/0th7b3mh>