



BA/MA/SA/Group/Lab:

Accurate Temporal Map of Switzerland

Aerial pictures are a fascinating visualisation of countries and regions, especially as we do not usually perceive our environment in this way. The first aerial picture was taken in the 18th century. Since then, photographic equipment got more elaborate and also the usage of these pictures increased tremendously. More and more services make use of them. Google Earth, for example, offers a view of the world in satellite imagery and aerial photography.

Switzerland's federal geoportal recently released old aerial pictures of Switzerland with corresponding location data. We believe these images could be presented in more interesting ways than just an online collection. Former work at our group has shown that by overlaying pictures it is possible to create a time lapse video or an interactive map which shows the evolution of Switzerland over the last centuries. However, to get visually appealing results, the image stitching has to be enhanced. The goal of this project is to improve the current implementation of an interactive map, with a focus on the image stitching. The end result should be an application ready for public release.



Of course, we are also interested to hear your own ideas what we could do with these pictures. Do not hesitate contacting us!

Requirements: This work will involve computer vision techniques. Creative thinking and advanced programming skills are advantageous to successfully work on this topic. The student should be able to work independently!

Interested? Please contact us for more details!

Contact

- Manuel Eichelberger: manuel.eichelberger@tik.ee.ethz.ch, ETZ G97