

Software for Histology-based Research

Topics

The first part of this talk features Voloom, a tool for fast 3D reconstruction from serial sections. Once a series of scanned histology sections is aligned and stacked back together in 3D, Voloom allows accurate and reproducible volumetric measurements and enables users to gain new structural insights into micro-anatomy.



Instead of staining a series of consecutive sections with just one dye, one may also want to explore a combination of IHC stains without the handling limitations of fluorescence histology. Slidematch allows users co-localize several IHC markers by aligning differently stained, consecutive sections, eliminating the need for washing and re-staining of the same section.



"Previously, we spent several hours to a couple of days to reconstruct [... with Voloom] it took 3-5 minutes for initial reconstruction and another 10 minutes for detailed reconstruction." Prof. Y. Yagi, Harvard Medical School



"Compared to other software co-registration, the for accuracy and robustness of microDimensions' alignment technology is unmatched, especially when we move on a high magnification level." Stefan Hamann, Biogen, USA

The talk will include a Q&A session and live demos of the software.

Company

microDimensions is a spin-off of the Technische Universität München, founded in 2011. We are experts in the field of microscopy image analysis, in particular 2D and 3D image segmentation, registration, and visualization.

Further Information

- Andreas Keil holds a PhD from the TU München and is (co-)author on about 20 scientific papers on medical image analysis and mathematical modelling.
- For more information, please contact him directly or visit http://micro-dimensions.com.



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