

ZEISS ZEN Intellesis

Image Segmentation for 2D and 3D Datasets



Standard wound healing assay with GFP expressing HeLa cells.



Easily classify image data such as scratch area or mitotic cells with ZEN Intellesis.



Based on the segmentation results, parameters can easily be analyzed with the ZEN Image Analysis Module.

Easily Segment Your Images by Machine Learning

Segmentation is one of the biggest challenges faced by today's microscopists. To acquire images is the first step. Generating data often requires more: an image processing specialist, who can create a workflow for segmentation using a combination of digital filters and tools. With image segmentation using machine learning you can avoid errors and influences of user bias. ZEN Intellesis is your software module for powerful machine learning segmentation of multidimensional images including 3D datasets. You can smoothly integrate multiple imaging modalities or achieve superior segmentation on any single image. Use your expertise to train the software and let ZEN Intellesis do the tedious segmentation.

Highlights

- Segment your images to create superior and precise results.
- Efficiently work with images from different microscope modalities. Train the software and seamlessly integrate your segmentation in your ZEN image analysis workflow.
- You only need to know your structures of interest. Images are simply loaded, classes are defined, objects are labelled and the model is trained. When satisfied, you can use your trained software to segment and analyze full datasets.
- ZEN Intellesis can be used with image formats readable by the ZEN imaging software including CZI, TXM, TIFF, JPG, PNG and more.

Research Areas

- Neuroscience
- Cell Biology
- Cancer Research
- Developmental Biology
- Plant Biology and many more

Segment Images from Diverse Imaging Modalities:

- Widefield Microscopy
- Superresolution Microscopy
- Fluorescence Microscopy
- Label Free Microscopy
- Confocal Microscopy
- Light Sheet Microscopy
- Electron Microscopy
- X-ray Microscopy
- Any other imaging technique



Download your free 30-day trial of ZEN Intellesis for powerful image segmentation in 2D and 3D.



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Advanced Image Processing across Multiple Microscopy Methods











Created for Your Applications

- Scratch Assays
- Growth Assays

- Multifluorescence Imaging
- Neurite Growth
- 3D Datasets
- Cell Type Classification
- Visualization of Cell Compartments
- Segmentation of Spines vs. Dendrites
- Tissue Detection
- And many more

- 1. Mouse Embryo growth assay, Celldiscoverer 7 (brightfield); Data produced with ZEN Image Analysis; Courtesy of Max Planck Institute, Berlin
- GFP labeled neuron dendrite and spines classified; Elyra structured illiumination
 Drosophila Calyx region, classification of presynap-
- tic vesicles and other cell compartments; electron microscope, Courtesy of Max Planck Institute, Berlin
- 4. Fluorescently labeled muscle cells, myosin variants and cell membranes classified; LSM 880 with Airyscan FAST; Courtesy of Dr. Jia Li



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