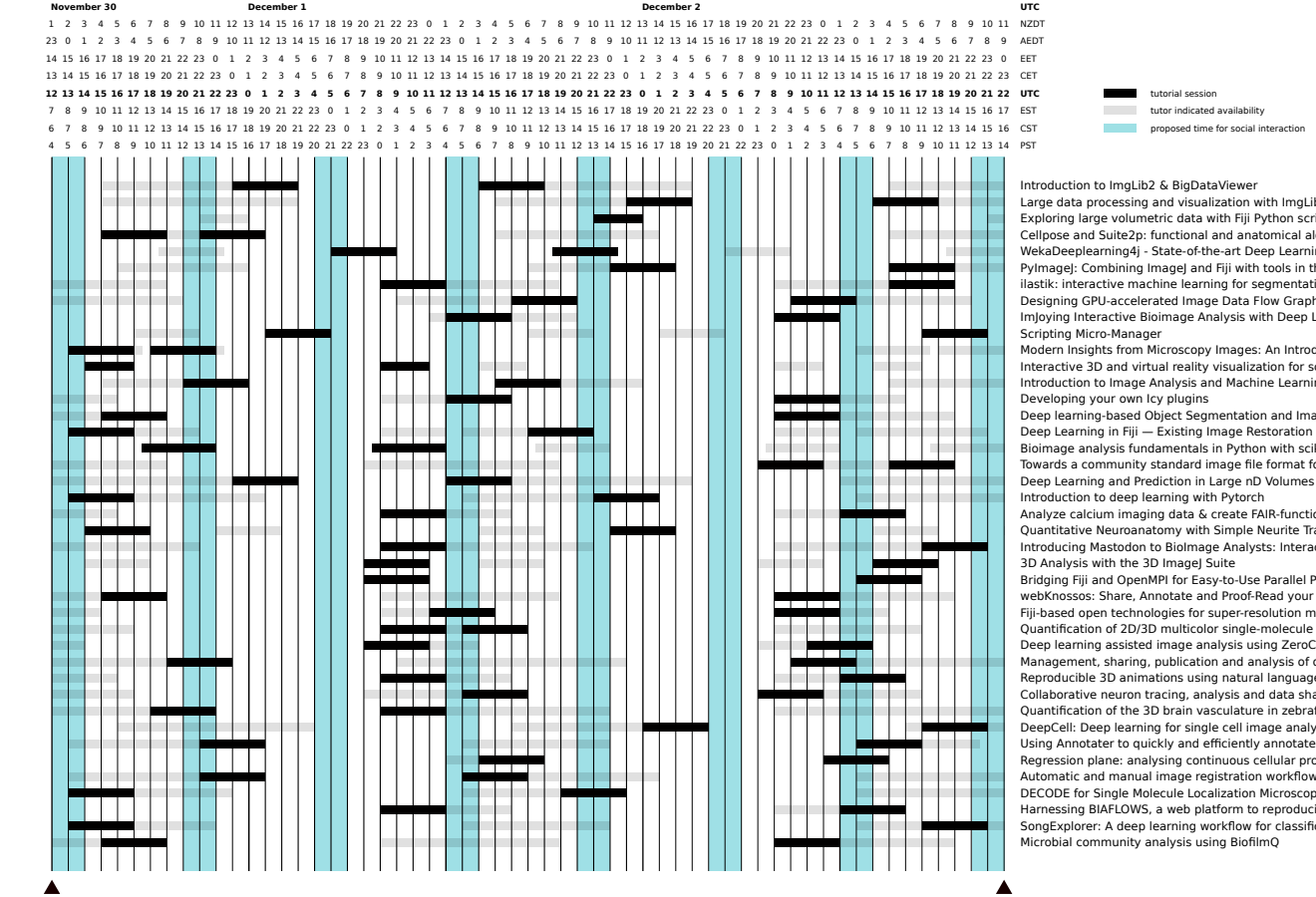
From Images to Knowledge with ImageJ & Friends

virtual workshop program

hhmi | janelia Conferences



Introduction to ImgLib2 & BigDataViewer
Large data processing and visualization with ImgLib2, N5, Spark, BigDataViewer, and Paintera
Exploring large volumetric data with Fiji Python scripting
Cellpose and Suite2p: functional and anatomical algorithms for cellular segmentation
WekaDeeplearning4j - State-of-the-art Deep Learning Techniques for Non-Programmers
PyImageJ: Combining ImageJ and Fiji with tools in the Python ecosystem
ilastik: interactive machine learning for segmentation
Designing GPU-accelerated Image Data Flow Graphs for CLIJ2 and clEsperanto and deployment to ImageJ, Fiji, Icy, Matlab, QuPath, Python, Napari and C++
ImJoying Interactive Bioimage Analysis with Deep Learning, ImageJ.JS & Friends
Scripting Micro-Manager
Modern Insights from Microscopy Images: An Introduction to Web-based Methodologies
Interactive 3D and virtual reality visualization for scientific images with sciview
Introduction to Image Analysis and Machine Learning With CellProfiler and CellProfiler-Analyst
Developing your own Icy plugins
Deep learning-based Object Segmentation and Image Restoration with StarDist and CSBDeep
Deep Learning in Fiji — Existing Image Restoration and Image Segmentation Solutions (and how to go beyond)
Bioimage analysis fundamentals in Python with scikit-image, napari, & friends
Towards a community standard image file format for sharing big image data in the cloud
Deep Learning and Prediction in Large nD Volumes
Introduction to deep learning with Pytorch
Analyze calcium imaging data & create FAIR-functionally linked datasets using the Mesmerize platform
Quantitative Neuroanatomy with Simple Neurite Tracer
Introducing Mastodon to BioImage Analysts: Interactiveand automatic tracking of millions of cells in large images
3D Analysis with the 3D ImageJ Suite
Bridging Fiji and OpenMPI for Easy-to-Use Parallel Processing of Images
webKnossos: Share, Annotate and Proof-Read your Large-Scale 3D Image Datasets Online
Fiji-based open technologies for super-resolution microscopy through NanoJ
Quantification of 2D/3D multicolor single-molecule localization data
Deep learning assisted image analysis using ZeroCostDL4Mic
Management, sharing, publication and analysis of data in OMERO
Reproducible 3D animations using natural language with 3Dscript
Collaborative neuron tracing, analysis and data sharing with CATMAID
Quantification of the 3D brain vasculature in zebrafish light sheet fluorescence microscopy data
DeepCell: Deep learning for single cell image analysis
Using Annotater to quickly and efficiently annotate or correct nuclei segmentation and identify associated markers in 2D immunofluorescence multiplexed images
Regression plane: analysing continuous cellular processes with machine learning
Automatic and manual image registration workflows
DECODE for Single Molecule Localization Microscopy
Harnessing BIAFLOWS, a web platform to reproducibly deploy and benchmark Bioimage Analysis Workflows
SongExplorer: A deep learning workflow for classification and unsupervised discovery of animal acoustic communication signals
Microbial community analysis using BiofilmQ