Extending Imaris Using Java and Launching Fiji Plugins from Within Imaris

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Abstract

In this presentation we show Imaris' Java programming interface in operation and demonstrate the interacts with Fiji. The demonstration will include extensions of popular applications, namely cell tracking and dendritic neuron detection, and is equally targeted for biologists and computer scientists.

Imaris is commercial image analysis software designed for the analysis of multi-dimensional fluorescent images. It was launched in 1993 and has grown continuously responding to user needs and instrument innovations. In 2004 the first version of the programming interface, called ImarisXT, has been released.

ImarisXT enables software developers to use Imaris as a framework offering an extensive collection of microscopy file readers, an image management subsystem fit for GB size images combined with advanced visualization, interaction, and statistics display subsystems.

Based on the fact that Imaris faces the same end-user challenges as ImageJ we would like to discuss the future role of commercially supported software frameworks in bio labs and are keen to learn how to expand the programming interface to best support the community.

Keywords

Programming interface, imaging framework, huge images, commercial software, plugin