

Imagejdev: Next generation ImageJ (need confirmation)

Any successful software project, after a period of sustained growth and the addition of functionality outside the original intended scope, will benefit from a subsequent period of scrutiny and refactoring. ImageJDev is an NIH-funded, multi-institution effort to strengthen both the ImageJ software itself and its community by pursuing a new vision of ImageJ and associated community resources, including code and plugin repositories, and user and developer documentation.

The ImageJDev project's main aims include:

1. Improving the ImageJ core architecture while preserving backward compatibility
2. Interfacing ImageJ with other open-source software
3. Providing centralized community resources for ImageJ-related materials

From a technical standpoint, we are working to improve ImageJ in five main areas:

- Image data model, particularly large multidimensional data
- Multidimensional visualization, including image registration and large images
- Image I/O, including data from sources other than disk
- Image segmentation (regions of interest)
- Extensibility and user development, including more robust scripting and plugin API

In this talk, we will describe the ImageJDev progress so far, including:

- Integration of the Fiji group's imglib generic image processing library
- Progress on a unified, Bio-Formats-based I/O infrastructure
- Improvements to the display architecture
- Unit testing efforts to prevent regression bugs
- An enhanced plugin development model that reduces boilerplate code
- Leveraging open source tools to create a richer client

Keywords

imagejdev, imagejx, community, refactoring, compatibility, interoperability

Administrative data

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Last update: **2010/11/15 10:01**