

Image editing and stitching panoramas for free

If you have not yet purchased an image-editing program such as Photoshop elements you might like to try Gimp the GNU Image manipulation program. It is open source (free) and as powerful as the full-blown version of Photoshop.

On the downside it is a little harder to use than Photoshop, and needs to run using the Mac's X11 environment. The Gimp is used extensively within both the Linux and Windows world so it is an excellent package to get to grips with, although it can take a little getting used to for Mac users. When using applications compiled to use the UNIX X11 environment you will notice that menus are attached to their windows instead of the screen and that file management is handled using a different file requester.

Since the gimp relies on X11 to run, it must be up to date. The gimp website mentions how to make sure this is installed correctly, but I found that OSX was fully up to date including updates applied via the Apple update utility to the X11 environment. I just had to install gimp in the usual way using the disk image installer from the website.



With luck (and a few requests) an enterprising programmer might take the gimp source code and compile it to use an Apple user interface instead of X11. This is what happened with Open Office.Org when it's source code was compiled to make Neo Office for the Mac.

Visit <http://darwingimp.sourceforge.net/download.html> to download the GIMP for PowerPC or Intel based Macs.

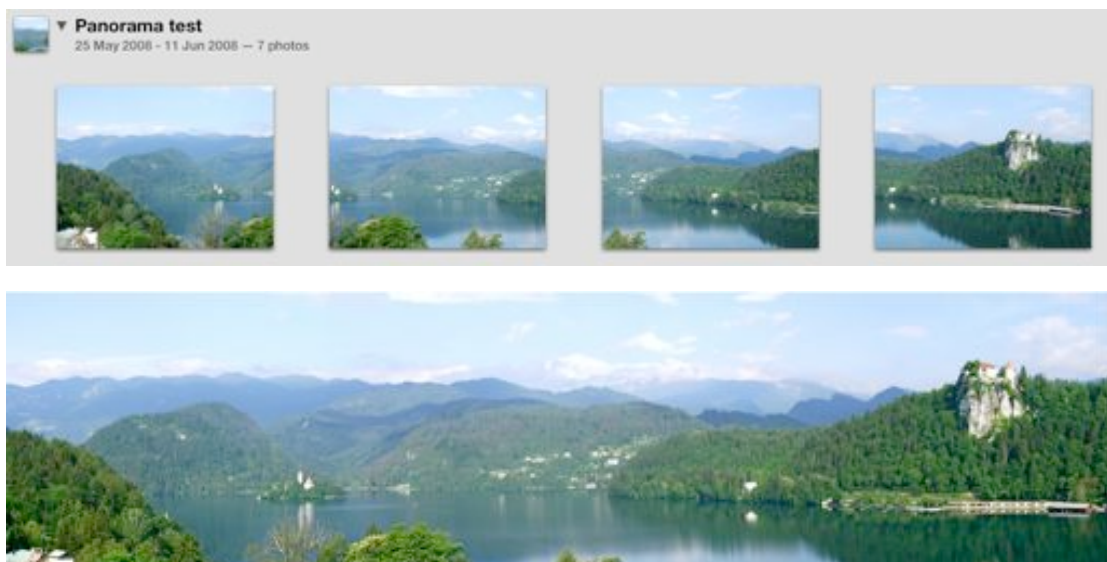
When you first run the gimp it will take a little time to initialise the X11 environment, then it will run. On subsequently running, it will launch quickly. It should look something like this.



I should say at this point that the excellent photo was not taken by me, alas. A friend of mine called Ian took it. Notice the menus above the open image file.

Stitching Panoramas

One thing that the gimp does not offer is panoramic photo stitching, whereby several photos that have been taken can be stitched together to form wide panorama shots.



These are the before and after images. Here's how I made the panorama.

Taking Pictures

Firstly you need to make sure that when you take photos for a panorama the exposure is locked so that each picture is exposed in the same way. I point my

camera to the middle of the scene and use the exposure lock feature so that each picture taken has the same exposure.

You are supposed to rotate the camera around the middle of the lens, if this is difficult then at least make sure you are not holding your camera at arms length, hold it right up to your eye so that as your head rotates the camera is close to the centre of rotation. You will need to overlap each image by roughly a third to make it easier to match them up later.

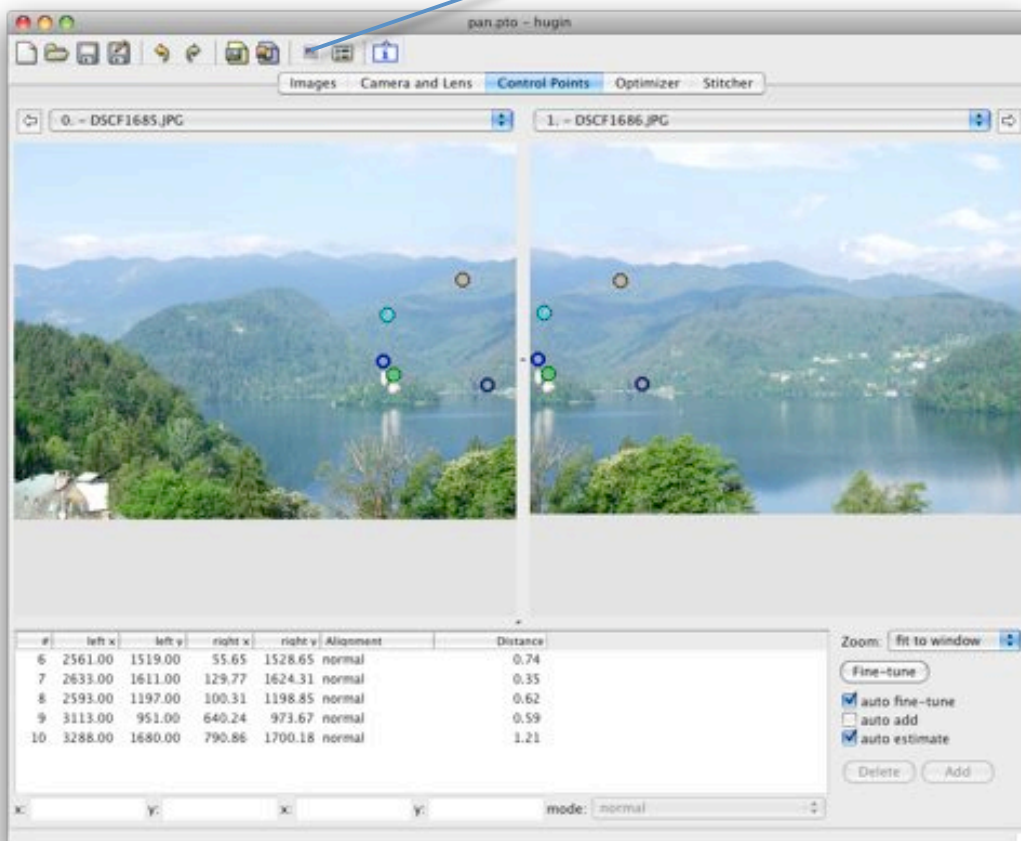
<http://jcornuz.wordpress.com/2007/11/12/panoramas-1-shooting/>
this is Joel's guide explaining how to take good panorama photos



After installing and running Hugin you can drag photos straight from iphoto into the hugin image window.

<http://hugin.sourceforge.net/>

From the control points view you need to match points from one image to the next where they overlap, if you use too few control points you can get some very strange results. Here I've used 5 points per photo. Click inside the first photo to define a point, hugin will do its best to find the corresponding point in the second image. It is usually very successful at doing this, making adding control points quick and easy.



The preview button

Once this is done, click on the optimizer view and click “optimize now”. Check to see what you have got by selecting the preview button.



If yours looks nothing like this, don't worry. Make sure your project is saved and go back to adjust settings. You might need to do “images/anchor image for position” on the first image, “stitcher/calculate field of view” and then go back to the optimizer. It took me a few goes to get used to using hugin, but I did manage to get very pleasing results without using any advanced features.

Once happy click stitcher/stitch now! You should end up with something looking like this.



From this quicklook view (press space while image file is highlighted) I can click the button that adds the panorama to iphoto. Once there I can straighten it, apply levels and crop it for the final result.



Hope you enjoy using these two open source gems!