

**DGM 3265**

# **Project 05**

## **Software Comparison**

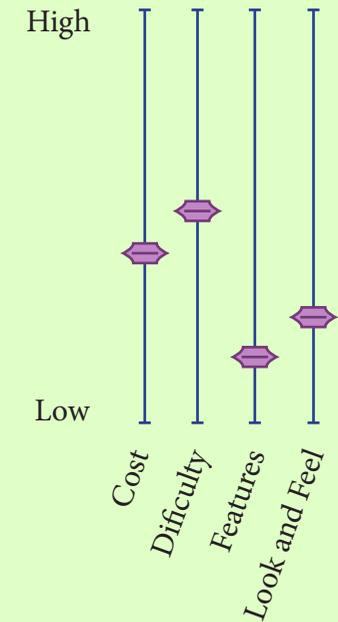
**William Stanton**

# PT GUI



When I first used PT GUI at the start of the semester it seemed like a pretty good program. Now that I have used Pano Giga a few times, this one seems a lot less professional and harder to use. I forgot that this can only do panoramas and it kept warping the entire photo really bad when I tried to use the top and bottom images. The one thing I did like was in the manual placement of the control points, it is easier to work with than in Pano Giga, maybe due to the reduced options it offers, but the actual placement was very similar. After a few points have been placed it will try and guess where in the other photo the corresponding point should go, in Pano Giga it makes you guess both sides no matter how many points have been placed. Something that I found very irritating was the insistence that I enter the camera's information, like focal length etc. I didn't know this

info and have never needed to enter it for Pano Giga. It would also rotate the images for no reason. I had a few images that I purposely went out and rotated in PhotoShop to make sure they were oriented properly and it still flipped them sideways after displaying them properly before doing so. Another thing that I wasn't paying attention to was the image order. If you do set them up properly in the Left-to-Right order they will not stitch properly. After a few tries, I figured out that this program does not like fisheye lenses. After placing a bunch of control points near the top and bottoms of the conjoining images, it started getting confused and stopped trying to guess where I was going with them.



**Cost:** \$112 - \$500

**Platform:** PC & Mac

**Delivery options:** JPG, TIF, PSD, MOV

**Fish eye capable:** Yes (Must know your lens' info)

**Easy of use:** Medium

**Extra features:** Limited

# Pano Monkey

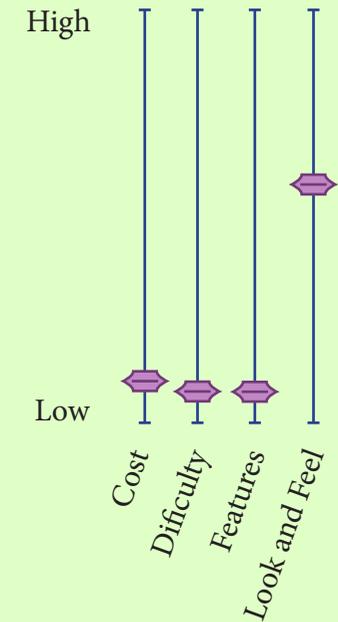


Panomony



The first thing I noticed is that it will accept JPG and RAW images. This made me feel like they were more serious about pictures than others. The other feature that I was hopeful for was the fact that they accept fisheye photos (and you can say if you used a tripod or not). I tried to upload some RAW files, but they were not stitched, but ended up placed in opposite corners of a very large black background. No clue what it was supposed to be used for. I tried again and they got stitched by their tops. A third try resulted in a near perfect rendition, with a small slice flipped upside down. As for the cell phone pictures, the end result was on par with the image you got with PT GUI. The best part of Pano Monkey was that all you had to do was upload the files and wait a while. I think it took about the same amount of time to process the photos as with PT GUI or Hugin, but

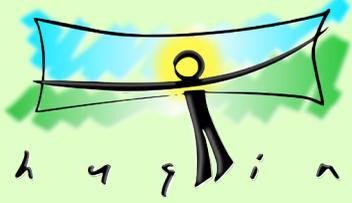
other than uploading the files, you really didn't have to do anything. And since it was all server side processing after they were uploaded, you still have full use of your computer with no CPU slowing. Just go back 10 or 15 minutes later and download your finished file.



- Cost:** \$2.50 per Pano (Smaller, Watermarked is free)
- Platform:** Web
- Delivery options:** JPG
- Fish eye capable:** Yes\*
- Easy of use:** Easy
- Extra features:** None

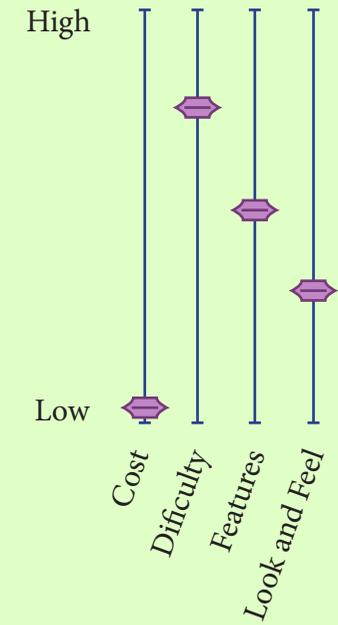


# Hugin



It had a similar feel to PT GUI, but this time it didn't have any default value buttons for generic lens angles or HFOV values. I just had to guess what it wanted. I am sure if you are more aware of what your cell phone's camera lens specifications are you would have an easier time with this part of it. Just like PT GUI, it had a hard time finding the control points by itself, so I had to manually set some. This was similar to PT GUI to set the points, but it was klunky in that you had to click the "Add" button every time you wanted to set the point. PT GUI set the points automatically after you set the corresponding point. Another thing that was disruptive was that you would zoom in after you set the first point, this is supposed to help get tweak the point, but it made it so that you lost your place when you went to go back to the second picture. I felt that the auto-estimate here was better than the one in PT GUI. Something weird was that

it asked you what you wanted to put for the prefix (I think they meant postfix, but they are asking for the file extension). I don't think I have ever seen a program ask you for this, they might ask for a filetype and if you want JPG or JPEG, but for you to type it in was weird. The first few times I tried to stitch the panorama it only came back with one of the photos warped into a roundish rectangle, I tried a few different options, including rectilinear, triplane, and stereoscopic, and eventually crashed the program. I tried a number of times to get the images to stitch even manually setting a ton of points only to have it crash due to its inability to connect to a server. I read up on it and a bunch of people have had the same problem but it seems there isn't an answer. They are told to uninstall and reinstall, but most of the people who tried still come back with the same problem. I took a screenshot of the preview and will stick with that.



**Cost:** Free

**Platform:** PC & Mac

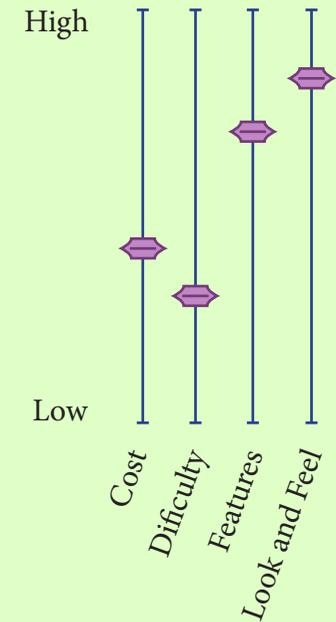
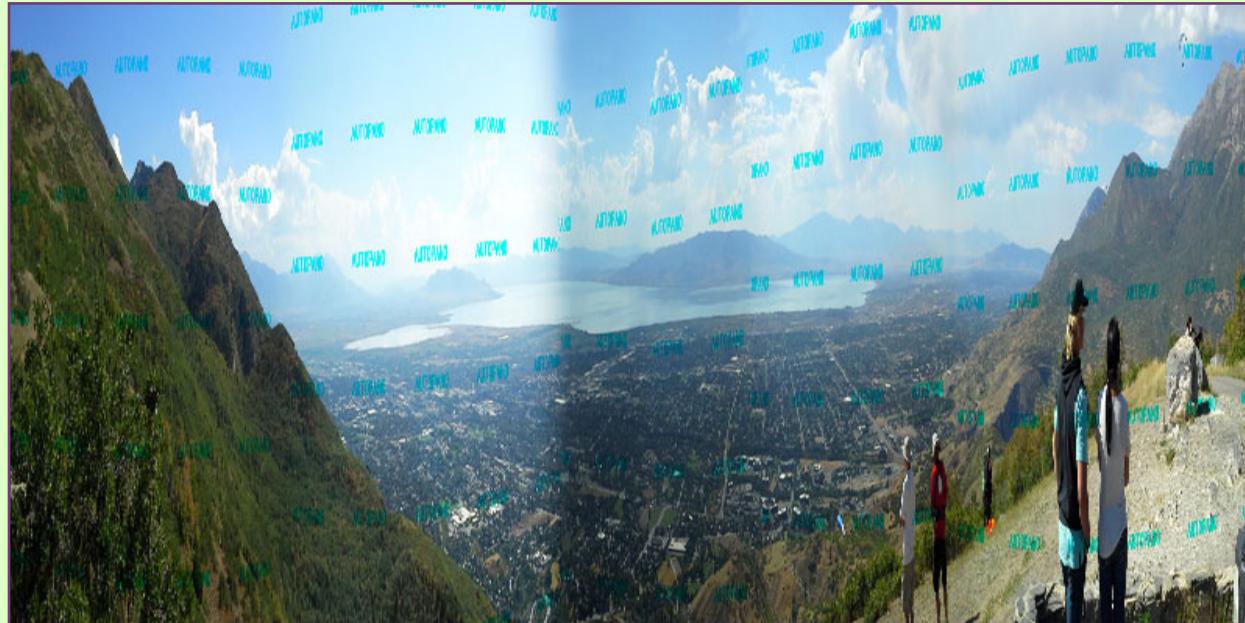
**Delivery options:** JPG, TIF, PNG

**Fish eye capable:** Yes (Must know your lens' info)

**Easy of use:** Medium-Low (Buggy)

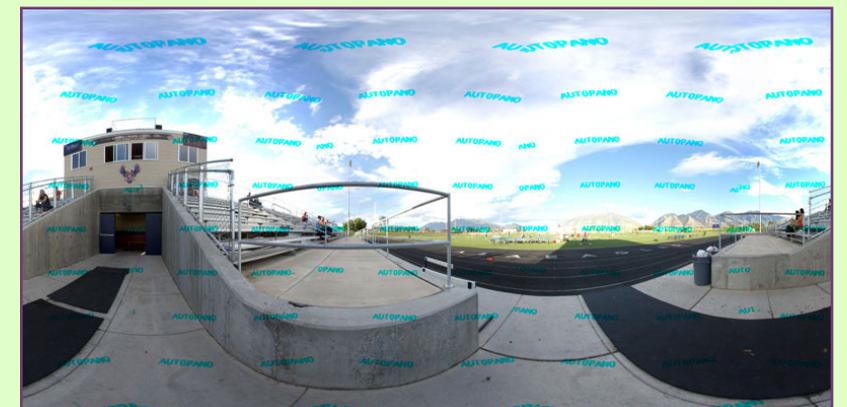
**Extra features:** Plugins available

# Autopano Giga



Although we use this program for the class, we use it mostly for making the cube pano and I have never given much thought to making a regular panorama with it. It was a huge file and took a lot longer to install than the others, but I think you get the full version with just a watermark to restrict it, so that is understandable. Although there is a ton of stuff you have to go through to get the file that you want, I was really impressed with how much better it came out verses the other programs when using the same, crappy cell phone pictures. Fortunately I already know how to work it from the tutorials or it would have been hell trying to figure it out. That is the one drawback with AutPano Giga, you can't just jump in and blast out product right off the bat, there is a learning curve. But after a few weeks, you get used to what you need and it isn't much of an issue.

**Cost:** \$270  
**Platform:** PC, Mac, Linux  
**Delivery options:** JPG, HDR, PNG, PSD, TIF  
**Fish eye capable:** Yes  
**Easy of use:** Medium  
**Extra features:** Jam Packed full of Goodies



# Closing Arguments

In conclusion, I am going to have to say that Autopano Giga was the best program for creating panoramas in that it gives you the most options, had the least amount of problems and came out with a finished product ready to go right when it is finished (no need to crop or anything). If you can afford the product, I would suggest this one. I would find a few jobs that might want you to do some panoramas and factor in some extra money to get it. But for those of us who are not much more than amateur photographers that just want to stitch together a few vacation photos, I would have to go with Pano Monkey! It took the least amount of effort and the finished product was just as good or better than the others (very close to AutoPano Giga). The biggest drawback was that the fisheye files did not process how I was expecting them too, but I am sure if I did a little research I could find out what I need to do to make them come out how they should.