GIMP – THE FREE ALTERNATIVE OR ADDITION TO PHOTOSHOP!
WINDOWS PC – MAC - LINUX
Workshop Demonstrator notes
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GIMP is a freely distributed software for photo retouching, image composition, and image authoring. It started as a Computer Visions Class Project at Berkeley in 1995, and is now available in many languages and for many operating systems. It is free and opens sourced, so anyone can add functionality to it through scripts or add-ins**.
The Official site to download GIMP: http://www.gimp.org/

After installation, plug-ins or scripts, described below, may be downloaded by selecting "Plug-In Registry" from the main gimp.org screen, or by going to http://registry.gimp.org/ and doing a search on their name (they end in .scm). The program is slow with too many plugins.
**When installing the plug-ins or scripts, put them in the following computer directory if using Windows: /c:/users/your user name/.gimp2.8/scripts

Here are links to some helpful websites, 2D and 3D:
http://blog.3dindia.com/2010/08/make-3d-anaglyph-images-using-gimp/
http://www.techzilo.com/gimp-plugins/
http://libregraphicsworld.org/
Lists of the most popular GIMP Plugins:
http://www.brighthub.com/multimedia/photography/articles/16924.aspx
http://garmahis.com/reviews/gimp-plugins/

DEMONSTRATIONS
Demo 1 Create Logos for title pages
(If you do not see a popup, check for a 2nd window)

File – create – logos- 3D Outlne

(if you do not see a popup, check for a 2nd window)

1)Logo1: File-create-logos-3D Outline Image-Scale Image width=711px; click Scale

2)Logo2: File-create-logos-3D Outline text=GIMP; pixels=100; click OK; **Image-Scale Image** width=711px; click Scale

1) Logo 1 = "Working with" text=100px **OK** **IMAGE-SCALE IMAGE**= px711
2) Logo 2 = "GIMP" text=100px **OK** I **IMAGE-SCALE IMAGE**= px313
3) **Background: File-Create-Render-Star Scape;** size=1024w x 768h
(or other desired size)
There are 3 icons toward the top of the page: Logo1, Logo2, and the Star Scape.

4) Click **Logo1**, edit-**copy**; click **Star Scape**, **Layer-New Layer,** name=Logo1, edit-paste and hover over "Working with" to see the **move tool** (cross with arrowheads) and click-and-drag the words toward the top. Click anywhere in the background to anchor the location.
5) Click **Logo2**, edit-copy; click **Star Scape**, **Layer-New Laye**r, name=Logo2, edit-paste, move and anchor as in step 4.

DEMO 2 TAKING THE TITLE PAGE AND MAKING IT 3D
6) IMAGE DUPLICATE Star Scape (creating two images (left and Right)
7) go to Image (L) image, scroll upper left corner of screen to see layers,
select Layer GIMP (layer after paste – move Float) then **MOVE TOOL**, click logo and and move it + 10 to 15 clicks to right
8) **LAYERS – MERGE DOWN** (probably 2x until only only image no layers)
9) **EXPORT** BOTH title pages as "Title L and Title R" jpeg
10) **Close ALL** images (to manually make an anaglyph, do not close)
(To make an anaglyph – manually)
Go to Image L, click to select ONLY the red channel, select all, copy
Go to Image R, click to select ONLY the red channel, paste

TO MAKE AN ANAGLYPH TITLE PAGE
11) **Open** both **Title L and Title R** as **LAYERS**
12) **STEREO- MAKE ANAGLYPHS**, approve red/cyan, view. (top (L) =cyan, bottom (R) =red
EXPORT TO SAVE

Demo 3 – MAKE ANAGLYPH FROM 2 IMAGES script: script-fu-make-anaglyph.scm, similar to above techniques starting with #12. Use this for dual camera rig or 2D to 3D conversions.

=> **OPEN AS LAYERS** the left and right images, choose **Stereo-Make Anaglyph**, USE cross icon to move/align window
12) **Open *PHONO_L AND PHONO_R*** both as **LAYERS**
13) **STEREO- MAKE ANAGLYPHS**,
approve red/cyan, view. (top (L) =cyan, bottom (R) =red
14) You can adjust layer for window with move tool **EXPORT** TO SAVE

This program creates stereoscopic 3D anaglyph photos from a stereo pair. In order to make use of this program, you will first need a pair of images from slightly different angles of the same object. You then need to place both images as different layers in the same image window in Gimp with the right image as the Bottom layer and the left image as the next layer above it and no other layers in the image (if you use this script in other circumstances then it probably won't work properly). The script finishes leaving the two images as separate layers so that final alignment adjustments can be made before merging the layers down and saving the anaglyph.

Demo 4 - BISECT A STEREO PAIR INTO 2 LAYERS script:
bisectStereoPairIntoLayers.scm
OPEN a left-right stereo pair that has been saved as a single stereo file,
choose **Script-Fu/Stereo Imaging/Bisect stereo pair into layers.**
(To view layers, choose Windows/Dockable dialogs/layers)

1) **Open *RESTING DOG*** – view 12% **choose Script-Fu/Stereo Imaging/Bisect stereo pair into layers.**
2) Remove original layer
3) Run **STEREO- MAKE ANAGLYPHS**, OOOOPS PSUDO!!!
To Fix …..

4) Open ***RESTING DOG*** –
choose Script-Fu/Stereo Imaging/Bisect stereo pair into layers.
5) Remove original layer
6) Drag Left Layer to above Right layer
7) Then choose STEREO- MAKE ANAGLYPHS,

Demo 5 -Adjoin 2 separate layers into a stereo pair script: adjoinLayersIntoSteropair.scm

1) File-OPEN AS LAYERS ***PHONO L and R,***; hold down the control key and select the left and right image files; click Open
2) Script-Fu – Stereo Imaging-Adjoin 2 separate layers into stereo pair;
click OK; this script will put the two images side-by-side to create a stereo card.
3) If the image is wider than the screen, use View-Zoom-Fit Image in Window. Alignment and sizing may need to be performed for proper printing.

Demo 6 Photo Adjustments ***Try these enhancements on any digital photograph. One script might look better than another depending on the picture. Each filter/application has many options and settings that can be changed. Here are a few of my favorites. Find and pre-load the corresponding .scm scripts from http://registry.gimp.org/***

Library of Congress, Phono r Elyse Sailboat *(my photo examples, use your own)*

Filters-Generic-National Geographic
Script-Fu/Enhance/Fake HDR Effect
Fx-Foundry - Photo-Enhancement -Vivid Saturation
Fx-Foundry - Photo-Effects- Bercovich Lomo
Fx-Foundry - Photo-Enhancement-Local Contrast Enhancement
Fx-Foundry - Convolution Matrix Presets - Brigthness-Contrast
Fx-Foundry - Photo-Enhancement-EZ Improver

Script-Fu - Photo-Infrared simulation
Script-Fu - Edges-Photo Border Fancy (select View-Full Screen and use the text tool to add wording under the picture)
Filters-Light and Shadow-Shadow&Highlighting
Filters-Artistic-Obama Hope (red-blue effect)
Filters-Artistic-Midnight Sepia
Filters-Artistic-Vintage Look
Filters-Decor-Antique Photo Border
Filters-Decor-Slide
Script-Fu - Photo-Copyright Text
Fx-Foundry - Convolution Matrix Presets - Sharp
Demo 7 2D to 3D conversion (instructions are similar for Photoshop and, Elements)

Method 1 uses gradiant tool
Method 2 uses gradient tool plus custom painting to enhance 3D layers

(If you intent to make a stereo card, start with a 3" square photo)
Load image ***grade 4.jpg*** and **duplicate** 2 more times(control D) (there are now 3 of the same image). (grade_4.jpg is my sample, use any 2D photo)
(Original (to be image map) – LEFT - RIGHT)

Image 1 = Image map
1) Select Image 1 = Image map
a) View-Fullscreen (zooms to full screen)
b) Click the foreground icon, and set R. G, and B to 127 (neutral grey)
Neutral grey will = at the stereo window
c) Click the background icon, and set R, G, and B to 0 (black)
d) Select Tools-Paint Tool-Blend (activates the gradient tool) click on the horizontal rainbow colored box gradient as FG to BG (RBG) Grey on left of Black
Gradiant = Linear
e) Select linear for the shape
f) Draw an imaginary line near the center of the image from bottom to top

2) Select Image 2 = left image
a) Select Filters-Map-Displace
b) Set the x displacement at -20 (negative), choose the image map file
c) Set the y displacement at 0, choose the image map file
d) Select displacement mode as cartisian, and edge behavior as wrap
3) Select Image3 = right image
Same as above for image 2, but set the x displacement as 20 (positive)

4) Select Image 2 (Left)
Select Red channel, Edit-Select All (control A), Edit-Copy (control C)
5) Select Image 3 (Right)
Select Red channel, paste (control V)
View , export Anaglyph

Method 2 For Custom Image Map
Follow the instructions for Method 1, but after 1-f, use the paintbrush to customize the image map with various shades of grey to manually set the depth of various parts of the picture.

Load Image ***Map Grade 4 Custom***. And ***Grade 4*** (2x) (Demonstration samples)
Repeat above processes, make sure to select Custom image map for displacement

Compare Grade 4 method 1 with method 2 (better but a little more work)

Show **How to create custom imagemap**
load Grade2 (2x)
Image 1 **create image map** (see above)
Image 2 (copy) Orignal
Image 1, image map, new layer, paste and change opacity to about 30%
paint 3D layers Window = 127, furthest back = 0, other layers from 127 to 0
then delete overview layer
Make sure you are working on image layer layer

Show ***IMAPcouple image map***
Repeat with ***Williamsburg Photo***