

# Photo Modular FX (V0.3)

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# INTRO

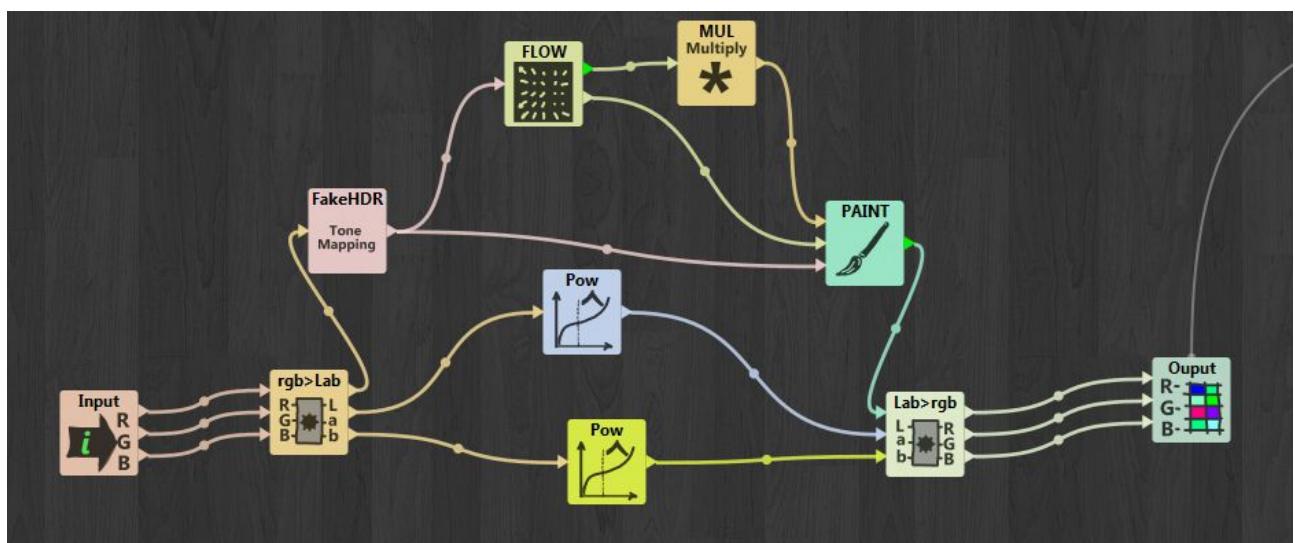
Photo Modular FX is intend to be a software to create unlimited custom Photo FXs based on connected "functions"/effects modules.

When you create an effect and apply it to a picture, the Effect Flow will be embedded in the output file (few bytes) , so it can be retrieved just by clicking "Import Project from Image". (The photo becomes the effect)

At the moment at the Output picture will be applied a light watermark. To remove it an Activation Key is needed. See the **ACTIVATE** "chapter".

Remember that connections Values are expressed in a range between 0 and 1 (except when overpass by computation)

Many thanks to **Olaf Schmidt** for the great support on GUI design: <http://www.vbrickclient.com/>



Online List of Nodes/Modules: [Click HERE](#)

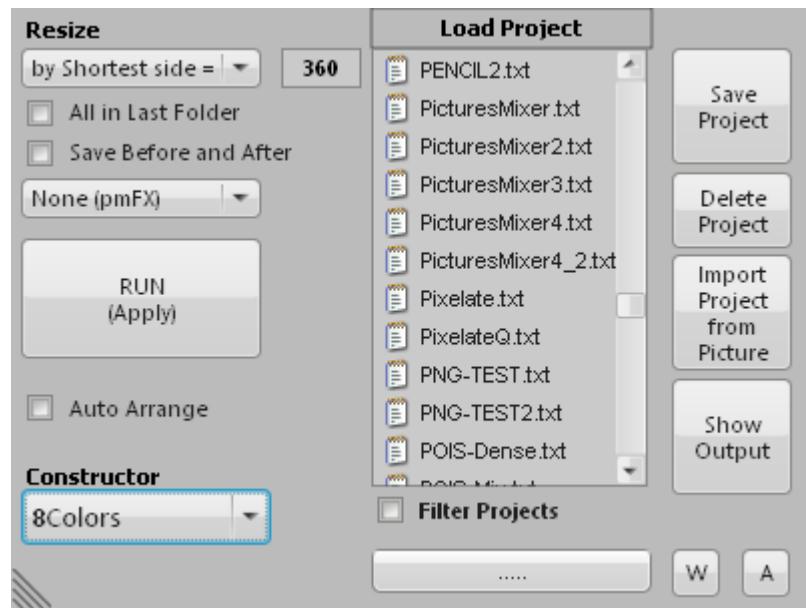
<https://miorsoft.github.io/Site/Projects/PhotoModularFX/HTML/fx000.html>

Online List of some Flow-Project Effects: [Click HERE](#)

<https://miorsoft.github.io/Site/Projects/PhotoModularFX/HTML/Thumbs/Thumbs001.html>

PhotoModularFX [WebPage](#)

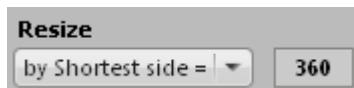
## MAIN PANEL



Main panel is a compact panel that contains all operations and options.

In it you can find:

### (Input) Resize



Here you can automatically resize the input image to a desired size before apply the Flow-Project effect.

There are three options:

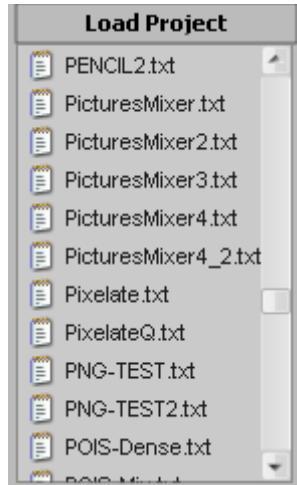
- By Shortest Side
- By Longest Side
- By Area (Kpixels)

On the right textbox you can type the number of pixels desired.

EG: If you want to work with 1MBytes pixels you can select By Area and type 1000 on the Right textbox.

The resized image will have its dimensions as multiple of 8.

## **Load Project**



To Load a Flow-Project just click it choose one of this list.

It will appear a small Preview of the Result.

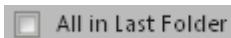
## **Filter Projects**



If you want to see only projects that contains a specific Node/fx you can choose the desired Node in the "Constructor" DropDownList and Check this option. (On low speed dirves you may have to wait some seconds)

If you want to see again all available projects just uncheck this option.

## **All in Last Folder**



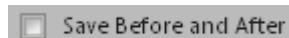
If you want to process all Photos in a folder you can use this option.

First you have to load a photo from the desired folder, then you have to Check this option and Run(Apply) the Process.

The current Loaded Flow-Project will be applied to all Photo in last used Folder.

While running you can uncheck this option to stop Processing.

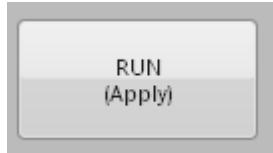
## **Save Before And After**



If you desire to have an Output file that contains Both the Source Photo and the Processed one, turn on this option.

The Output Image file will contain both Source and Processed Photo. (Side by Side, or Up/Down)

## **RUN – Apply**



Once you select the Flow-Project to apply and the Source Photo Click this button to start the Elaboration of the Photo(s)

You will see a green ProgressBar showing the Processing Steps Progress.

Sometimes it will see stuck to you. Just wait it's because some of the Nodes/Fx require a lot of time to process.

When the bar will be full-green you will see appear the output result.

## **Constructor**



This is the DropDownList used to select a Node to Add to the Project.

Click it, Scroll it and select the desired node/fx to add to the Project.

The new node will appear below Main-Panel.

## **Auto Arrange**



This is not so useful... Almost done for fun.

Turn on this option to make the Flow-Project Nodes automatically arrange to "optimal" position.

Then Turn it off.

Sometime the Nodes positions are not what we'd like. You will move the nodes manually.

## **Main BUTTONS**

Here you can find:

## **Save Project**

If you edited an Existing project or if you created a new one with this button you can save it.

A window will appear. In it you can type the Project Name and the Project Description.

When a project is saved it needs a new "thumbnail"-preview file.

If you leave turned on this option it will automatically be created using last Loaded Photo (at a shortest size of 360 shrunk to 240), so that when you will load again this project by clicking it, it will appear its Image-Preview.

## Delete Project

To delete a project first you have to load it.

So click the project you want to delete and click this button.

If the project has a Project-Image-Preview (Folder \Project\Thumbs\), even it will be deleted.

## Import Project From Picture

This is a cool feature:

When a Photo is processed, the output result file will contain the Flow-Project used to create it.

(In it it will be embedded the Flow-Project.)

The Processed Image becomes the Effect itself.

So if you have a Processed Image (in your OutPut Folder or given to you by someone else that uses PhotoModularFX) and you don't know how to apply the same effect to another photo you can just click this button and choose the source Photo.

The Flow-Project used to create that effect will be loaded and so you will be able to apply it to another Photo.

## Show Output

All the processed image will be saved in the "OUT" folder. To open it and see the result of your processing click this button.

## W (web - UPDATES)

Times to times. Every month or two you can click this button to Check for UPDATES.

The Browser will open SoftPedia or Dropbox-Based site where you can download newest PhotoModularFX version.

## A (Activation)

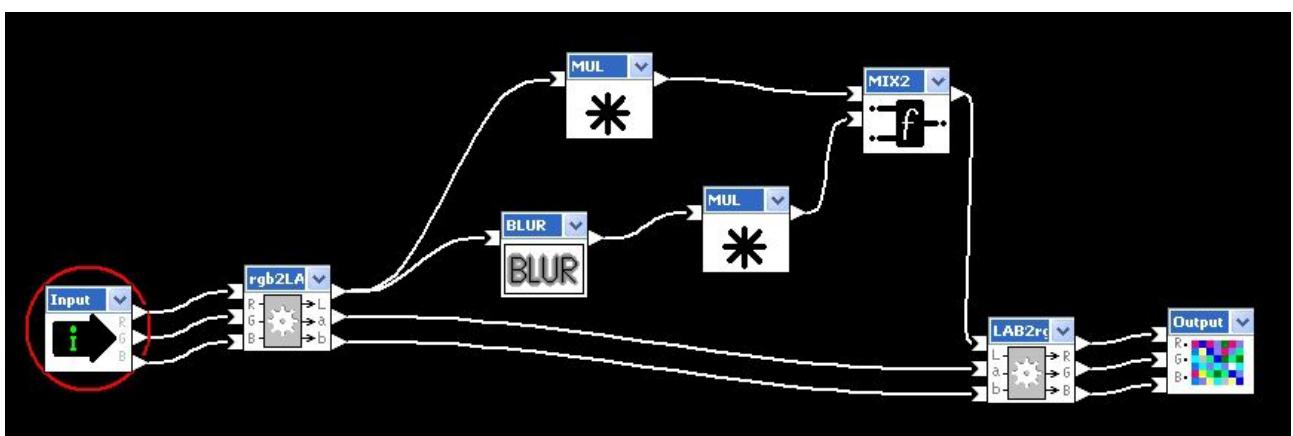
Go to ACTIVATE-"chapter"

# HOW TO CREATE A PROJECT FLOW.

Let's see an example of how to create a project flow.

Despite the "Unsharp mask filter" is already integrated as a single function ( called USM ) , let's see how to create it with other modules from zero.

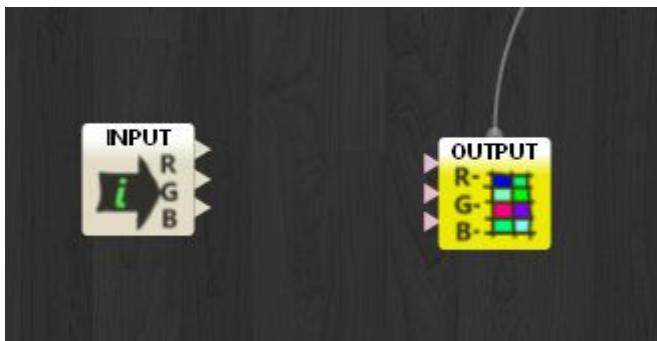
- First of all load the "START2" flow-Project, which has already included the RGB2LAB and LAB2RGB conversion. (Since we work with the Luminance "L" channel)
- Go up left and Select the module to add. In this case BLUR. Click Blackboard to add it. (You can click and Drag any Module in the Blackboard)
- **On NEW GUI , in the up right panel select the constructor Node , and click ADD**
- Connect Output from RGB2LAB to BLUR. (Click the first output of RGB2LAB and drag it to the input of BLUR). To ERASE a CONNECTION right click near to an Extreme of it.
- **On NEW GUI to Erase a Connection go over it (It turns Green) and Right Click**
- **On NEW GUI to Erase a node Right Click it**
- Click BLUR, at right will appear the selected module parameters, in this case the Radius. Put an amount bigger than 1
- Add 2 MUL (Multiply) modules and connect them as below. The MUL that has as input the output of BLUR represent the Amount Value of the Unsharp Mask filter. Assign to it a value of 150 (that means 1.5 [150%] ). To the other MUL (the one that has as input the output of RGB2LAB) apply the value of first MUL + 100. (In this case 150 +100 = 250 , that means 1.5 + 1 = 2.5)
- Add a MIX2 (Mix 2 channels) Module and connect the inputs as figure below. Select the Mix Mode as SUB (Subtract) , that means that the output will be Input1 minus input2
- Lastly connect the output of MIX2 to LAB2RGB first input.



Load a picture and click RUN.

## **Start**

To start a new project go to Project List and click START.txt



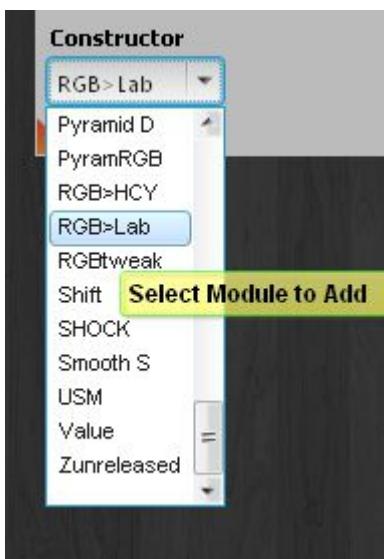
This is the minimum nodes required to start a project.

Remember: **CONNECT ALL INPUTS OF EACH NODE ! (OUTPUTS CAN BE DISCONNECTED)**

Then, for example, if you want to work with CieLab ColorSpace, you can load START2.txt project file, or add nodes and connections manually.

## **Add a Node**

Go to Construction (in the Up Right Panel) and select the node to add.



Then click the new added node and drag it where you want

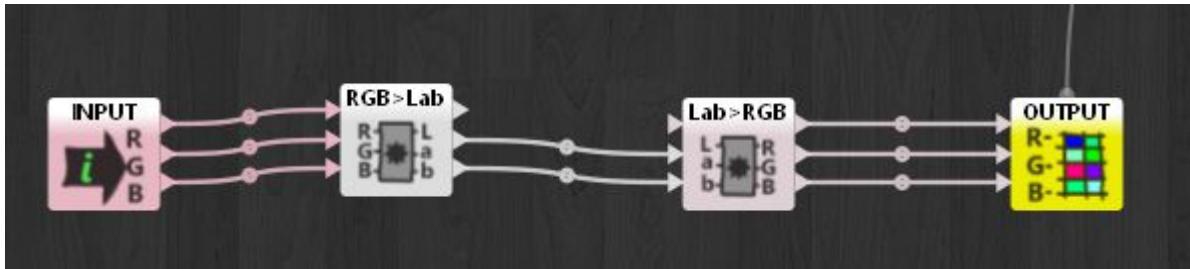
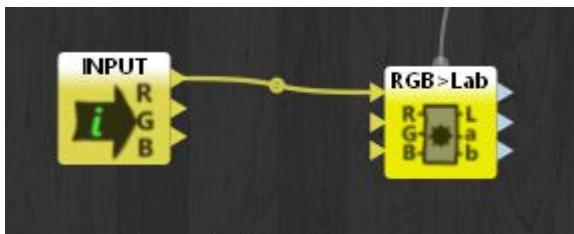
## **Delete Node**

To delete a node just right click it.

## Add a Connection

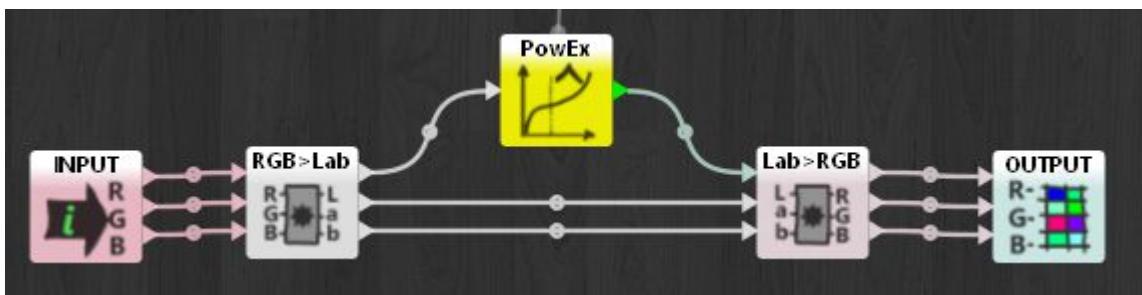
Move mouse near to the NodeOutput you want to connect.

Click And Drag it to the NodeInput to attach to.



Now, let's see how to increase Luminance contrast.

Add the PowEx Node

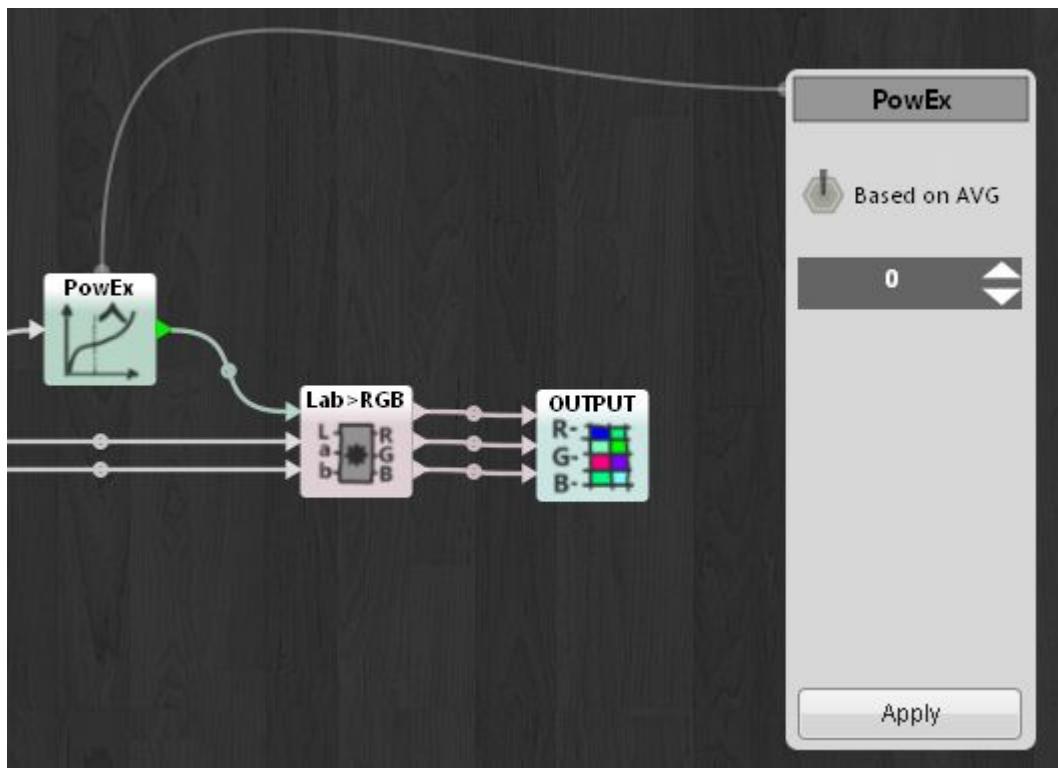


## Delete a Connection

Go with mouse over it and right click

## Parameters

If a node has parameters, they are visible and tweakable by clicking the node.



## Run Flow

Apply Flow-Project Effect to loaded Photo



## [ ZOOM ]

Some user experienced too small fonts or not so clear UI.

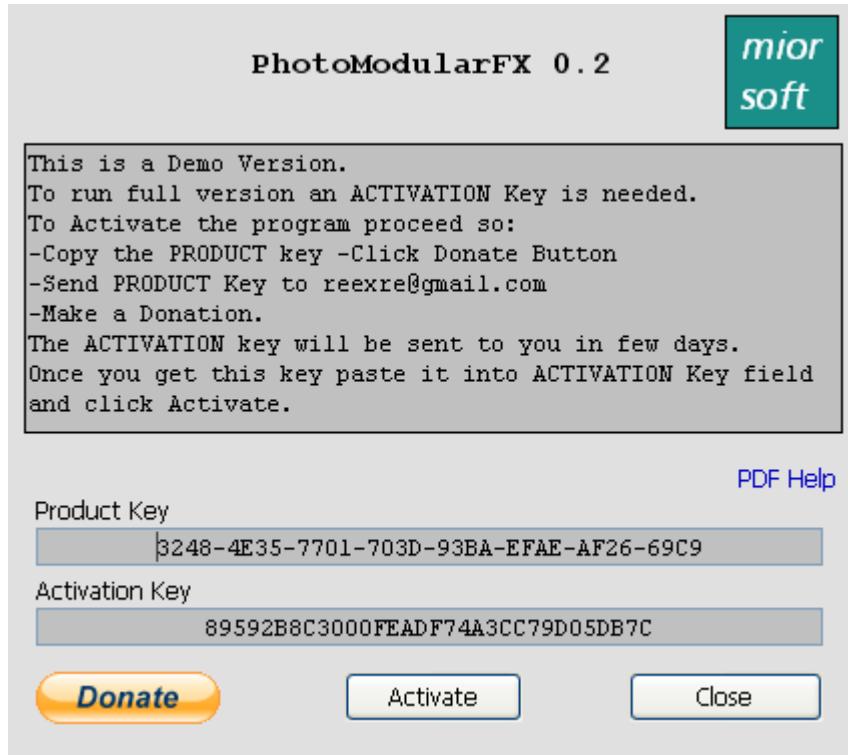
So Now (After V0.2.1599) it is possible to Zoom in/out the whole main window.

- To Zoom : Keep CNTRL-Key pressed and Rotate the Mouse Wheel
- To Reset Zoom to 1: Rotate Mouse Wheel by keeping its button down.

## ACTIVATE

The Demo version is full functional and have only a little "limitation": At the output pictures is applied a light watermark text up and below.

To remove the WaterMark click "A" Button

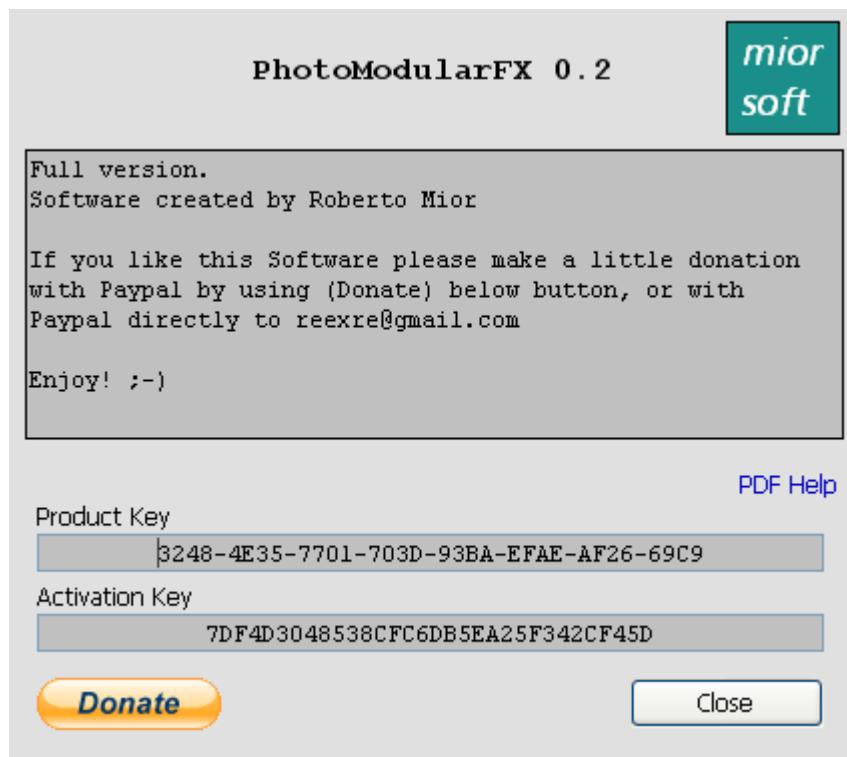


Here you can find your Product key, that will work only on a single machine.

To obtain the correct Activation Key do these steps:

- Select and copy the Product Key
- Send the Product Key to [reexre@gmail.com](mailto:reexre@gmail.com)
- Make a free donation with Donate Button.
- The Activation Key will be sent to you in few days.
- Paste the received Activation Key in the ActivationKey field
- Click Activate.
- The Software will restart in Full Mode with NO WATERMARK

After auto-restart if you click "A" Button it will appear something like this:



## **MODULES / EFFECTS :**

Will follow a list of single Effects that can be apply to input image / digital signal



### **INPUT**

The Input Image



### **INPUT2**

Support input picture, there can be more than 1 input2.

Useful to mix/blend pictures together or whatever else.

The 2<sup>nd</sup> input picture Path will be saved in the project, and it have the form of relative path to main Folder.  
So if you port the project consider paths.



### **OUTPUT**

Output Image (to Display and File)

### ***Colorspaces conversions:***



### **RGB>Lab**

Convert RGB color Space to Cie Lab color Space

3 Inputs, 3 Outputs



## Lab>RGB

Convert Cie Lab color Space to RGB color Space

3 Inputs, 3 Outputs



## RGB>HCY

Convert RGB color Space to HCY color Space ("Hue,Chroma,(Y)Luma")

HCY is a colourspace which shares some features with HSL and YCbCr - it has Luma ( Y ) like YCbCr and fills the whole cube space like HSL, making it an ideal candidate for image editing.

1. Hue (H) computed in the same manner as HSV and HSL;
2. Chroma (C) computed as the scaled difference between the maximum unweighted RGB component and the minimum unweighted RGB component; and
3. Luminance (Y) computed as the weighted sum of RGB components.

3 Inputs, 3 Outputs



## HCY>RGB

Convert HCY color Space ("Hue,Chroma,(Y)Luma") to RGB color Space

3 Inputs, 3 Output



## RGB>HSL

Convert RGB colorspace to Hue-Saturation-Luminance using Quasimondo.com / Standard Algorithm



## HSL>RGB

Convert Hue-Saturation-Luminance to RGB colorspace to using Quasimondo.com / Standard Algorithm



**RGB>XYZ**



**XYZ>RGB**



**RGB>YUV**



**YUV>RGB**



**RGB>Yxy**



**Yxy>RGB**



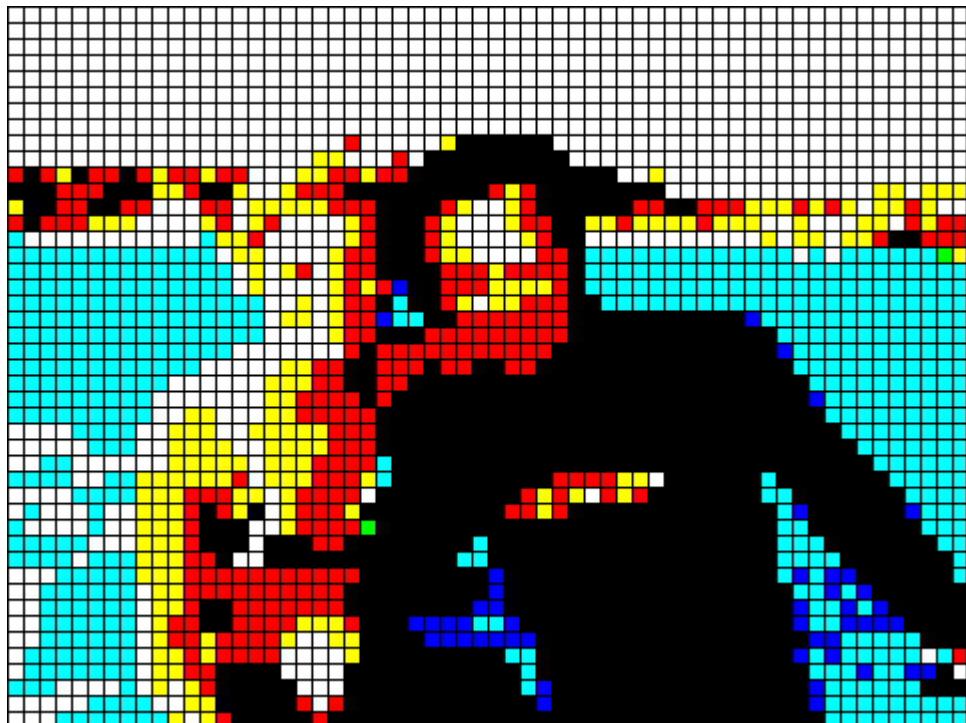
**RGB>CMYK**



**CMYK>RGB**



**8Colors**





## ACE

Adaptive Contrast Enhancement (Advanced Version of LCN: Local Contrast Normalization)

Examples:





## **ADD**

Just add a value (positive or negative) to current channel



## **BCS (Brightness-Contrast-Saturation)**

Brightness , Contras and Saturation



## **BilaOA: Orientation-Aligned Bilateral Filter**



## **BilaOAEx: Extended Orientation-Aligned Bilateral Filter**



## BILATERAL

Edge-preserving Noise-reduction Smoothing Filter





## **BLEND**

Mix the first-channel with the 2nd-channel by an amount given by 3th Input.

Blend 2 Values using a 3th input-parameter. Inputs: A,B,C .  $Output = A * (1 - C) + B * C$





### **BLEND3**

Blend 3 - Mix the 3-first-channels with the 2nd-3-channels by an amount given by 7th Input.

7 Inputs: A1,A2,A3,B1,B2,B3,C .  $Output1 = A1*(1-C) + B1*C$  ,  $Output2 = A2*(1-C) + B2*C$  ,  $Output3 = A3*(1-C) + B3*C$



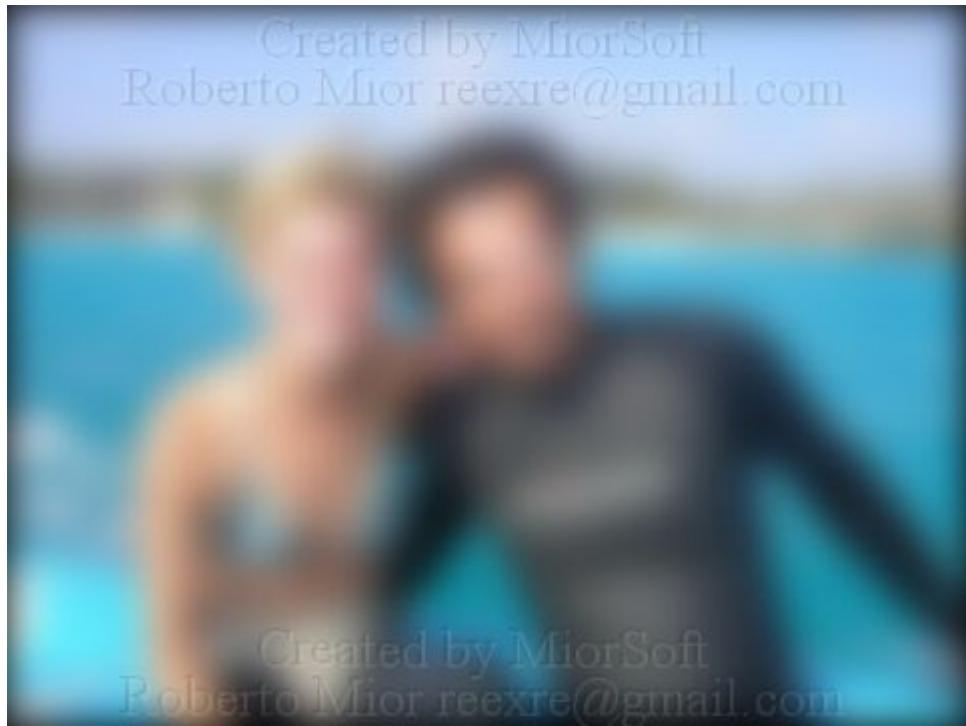
### **BLUR**

### **BLUR**

1 Channel Gaussian Blur

## **BLUR3**

3 Channels at one time Gaussian Blur



Fast Gaussian BLUR (IIR)

Source code translation from C and is licensed by Simplified BSD license

Author [Pascal Getreuer](#)

[www.getreuer.info/home/gaussianiir](http://www.getreuer.info/home/gaussianiir)

License: <http://www.getreuer.info/home/gaussianiir#TOC-License>



## **Borders**

Apply Borders/Vignetting





## CANNY

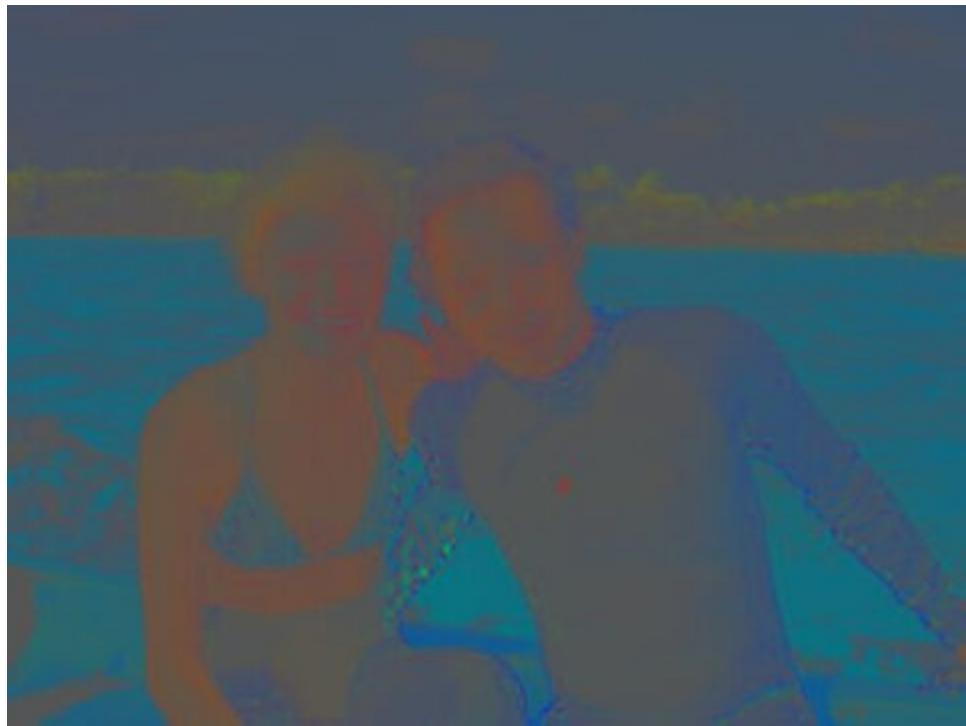
Canny edge detector



*No  
Intensity*

## **CHROMA**

Chromaticity Space, No Intensity information. (Also called Normalized RGBs)



## **CHROMAK - ChromaKey**

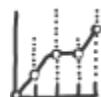






## ColorMatrix

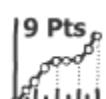
ColorMatrix



## CURVE

A simple Spline 5 Point curve interpolation.



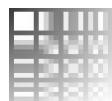


## CURVE9

As CURVE but with 9 Control points.

## **DCTEqu**

Discrete Cosine Transfrom Equalizer (WIP)

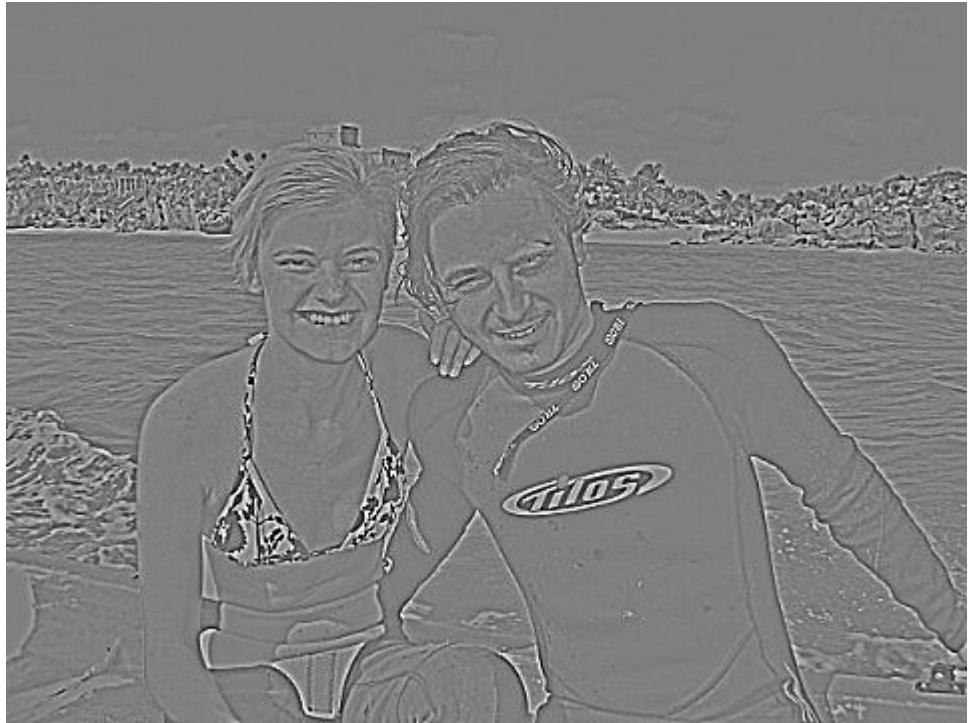


## **DCT BP(Discrete Cosine Transform)**

Experimental Discrete Cosine Transfrom Band Pass

Can be used to:

Enhance/Extract Details:



Attenuate Details:

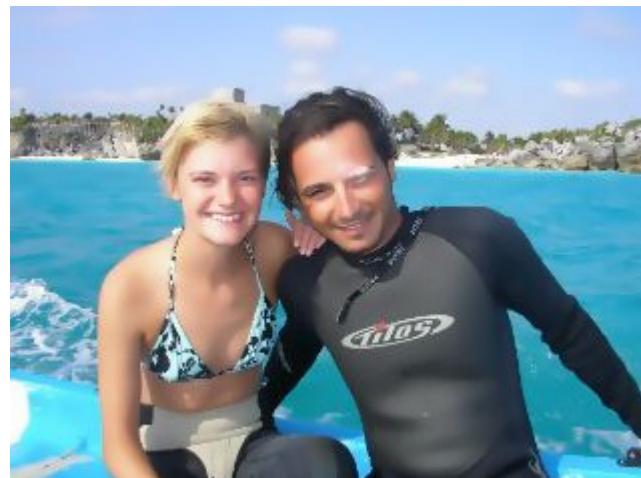


$$e^{-(\nabla I/K)^2}$$

## **Diffusion**

Simplified Iso/Anisotropic Diffusion

Similiar and little faster than Bilateral.



## ***Distortion***

Deform warping Algorithms:

### Fisheye



### Pinch



## SIN Radial



## Radius to Power (1)



## Radius to Power (2)



## SIN Cartesian



## Square root Cartesian



## Arcsin Cartesian



## Lens



## Swirl 1



## Swirl 2

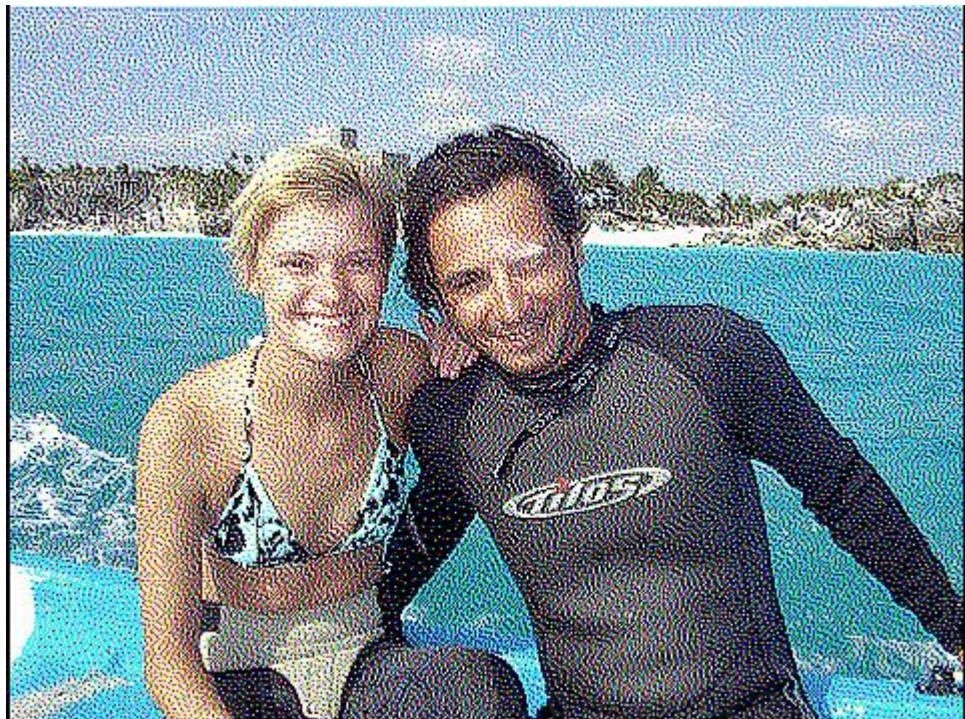
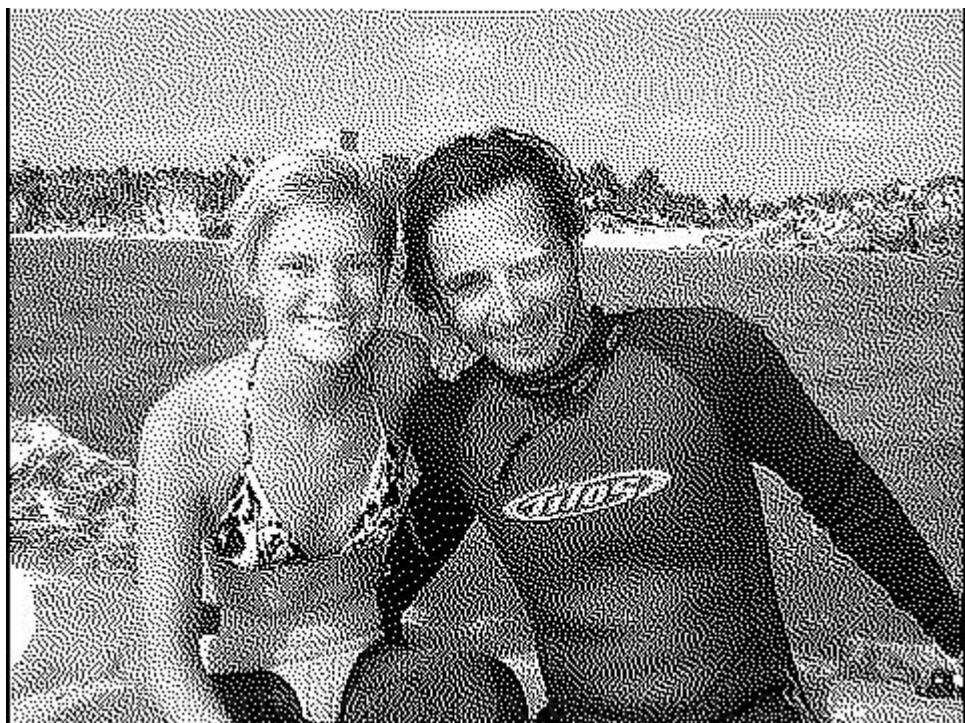




## Dithering

Error diffusion Dithering Algorithms:

Sierra





## Difference of Gaussians (DoG)

Difference of gaussians

Both - R=1.7



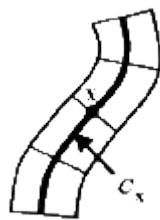
Absolute - R=20



Passing through Flow and Paint (R=2.7)

Created by MiorSoft  
Roberto Mior reexre@gmail.com





### ***FLOW Difference of Gaussians (DoG F)***

Flow Based Difference of gaussians

-Small Radius, Negative , Invert



-Small Radius, Both



-12 Radius, Negative, Invert



-26 Radius, Negative, Invert





## EDGES

Detect edges using 5x5 sobel magnitude.



## EXP-LOG

Simple EXP() or Log() Function

Tone  
Mapping

## *fake HDR - Local Tone Mapping*

Local Tone Mapping or Fake HDR (High Dynamic Range)

**VERY SLOW!**

\*Still developing Phase



## ***FLIP***

Horizontal Vertical & Both Flip/Mirror

## ***FLIP3***

Horizontal Vertical & Both Flip/Mirror on all three channels

ORIGINAL



HORIZONTAL



VERTICAL



BOTH



## FLOW

1 Input

2 Outputs that are

- ✓ Pixel Angle Magnitude (0 – 1)
- ✓ Flow Angle (0-1)

These outputs must be Input of other Functions such as *PAINT*

Magnitude Output:



Angle Output (iterations 4)



# *f()*

## **FORMULA**

Transform pixels [X] according to any formula. Powerful but very slow.

At the moment it's possible to use these Variables:

X – Pixel Value

W – X Distance from center (-1,1)

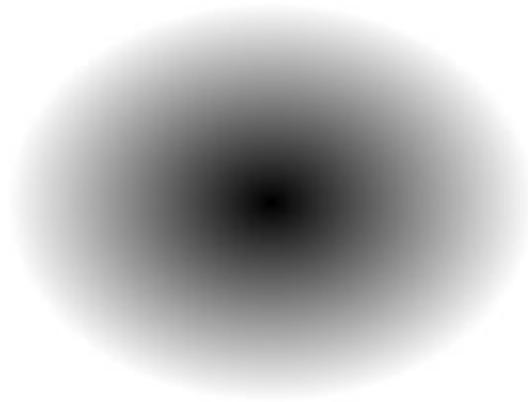
H – Y Distance from center (-1,1)

PI – 3.14...

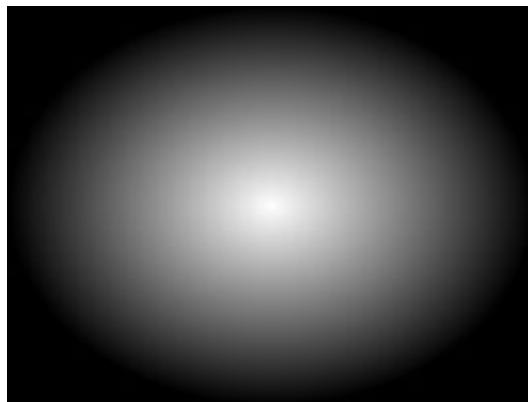
In future there will be more variables and "Formula" Nodes with more inputs (now only 1 input [X] )

Examples:

formula:  $\text{sqr}(w*w+h*h)$



formula:  $1-\text{sqr}(w*w+h*h)$



Original Grayscale



formula:  $X^{0.3}$



formula:  $X^{2.5}$



formula:  $\sin(x \cdot \pi \cdot .5)$



formula:  $x+(0.5-\text{abs}(w))$



formula:  $x*(1.25-w*w)*(1.25-h*h)$



formula:  $\arcsin(x*0.5*\pi)$



$$\gamma$$

## GAMMA

Simple Forward/Inverse Gamma Correction:

Orginal



Forward



Inverse



## **GLASS**



## **GLASS3**

Window glass effect (1 channel & 3 channels)



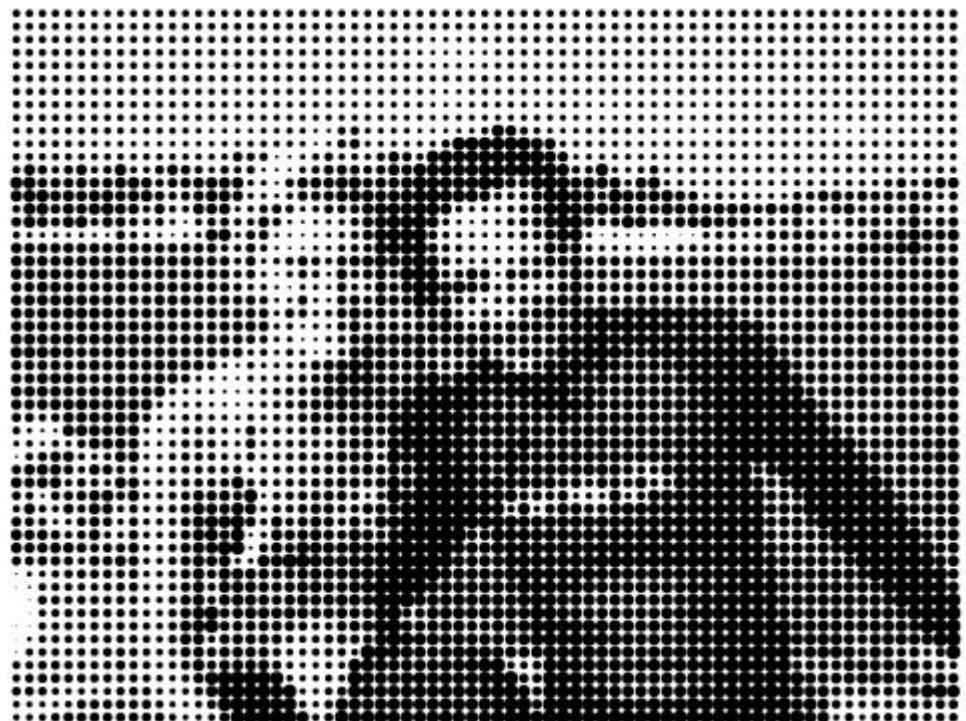
## **GLOW**

\*Still Developing

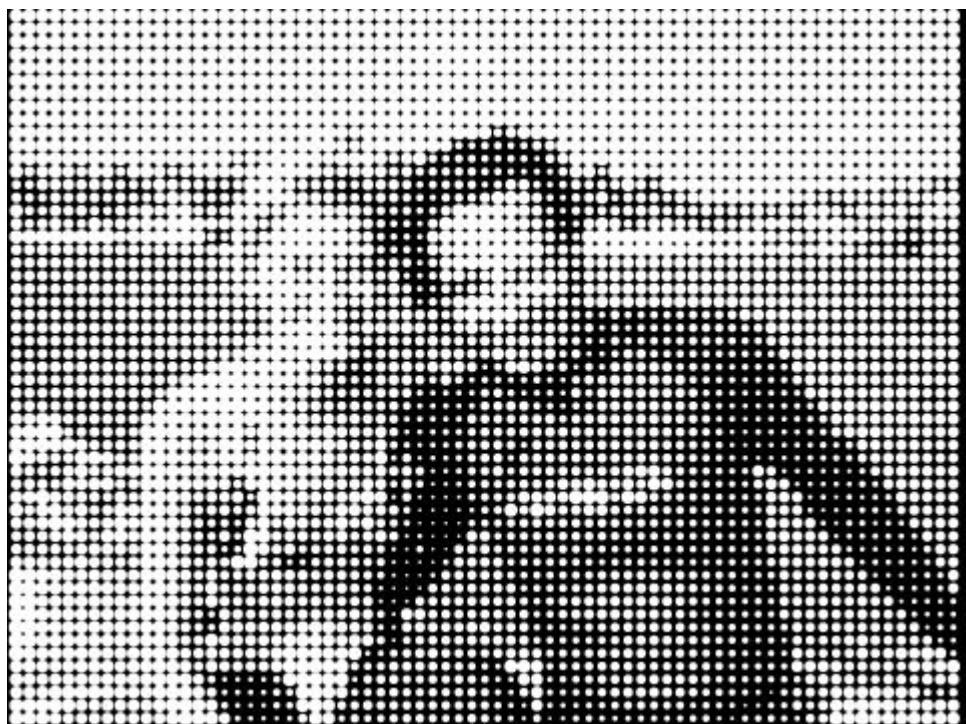


## **HALFTONE**

Black Rounded



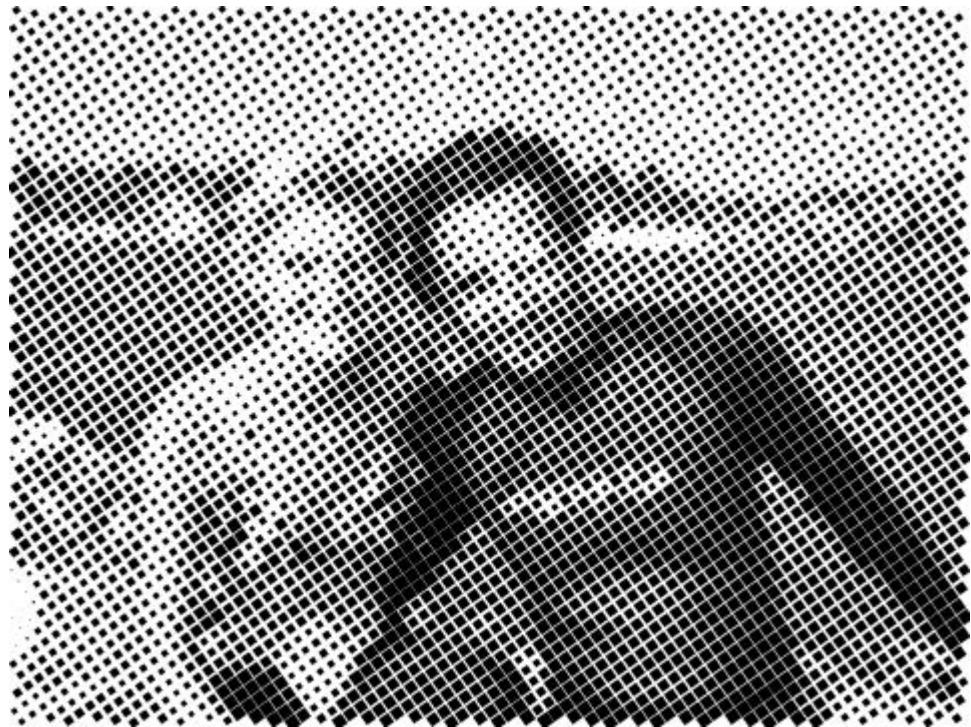
White Rounded



Leaf



Rotated Box



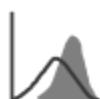
### **HAZE: Fake Haze effect**





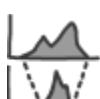
## ***HeatMap***

GaryScale to HeatMap



## ***HISTOGRAM EQUALIZE***

Simple histogram equalization based on cumulative function



## ***HistoMATCH***

Histogram Match (Histogram Match - Change Input1 to match Input2 Histogram) Look Project

HistoMatch[...]

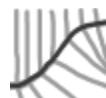
From this source picture:



And this Second picture as reference:



Change the picture according to the 3 RGB histograms of reference picture. Result:



## HMAPD

Height Map Deform. Deform by Heightmap (4th input as heightmap)

Take a look at HMD???.txt projects



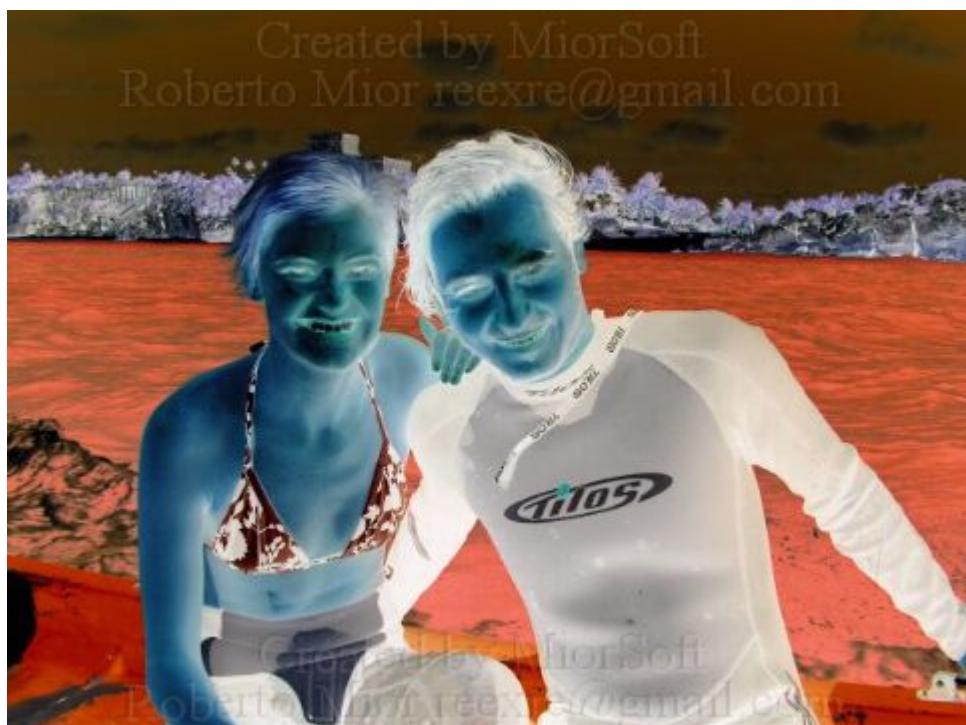


## ***INVERT***

Invert the input:

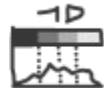
OUT=1-Input

Invered All RGB channels



Inverted Luminance channel

Created by MiorSoft  
Roberto Mior reexre@gmail.com



### Kmean CLUSTER (1,2 & 3 D)

Perform Kmean Cluster Quantization/Discretization

Created by MiorSoft  
Roberto Mior reexre@gmail.com



Created by MiorSoft  
Roberto Mior reexe@gmail.com



Created by MiorSoft  
Roberto Mior reexe@gmail.com





**Kwuahara**





## ***Kwuhara Anisotropic***

Still developing





## LCD Display

A sort of old LCD display effect





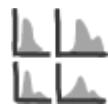
## ***Local CONTRAST***

Local Contrast

\*Still developing Phase

Applied on Luminance Channel





## ***Local HE (Histogram Equalization)***

LCLAHE - Local Contrast Limited Adaptive Histogram Equalization

Perform Contrast Limited Histogram Equalization using only Pixels neigboorhood window for each pixel.





## LocalHE2

Local histogram equalization 2. - Perform Contrast Limited Histogram Equalization using only Pixels neigboorhood window for each pixel.



## MAP

Map range using Input Min and Max values range mapped to New Min and New Max Values. (Output not Clamped)



## LocalMAP

Like MAP but within a local window give by a radius.

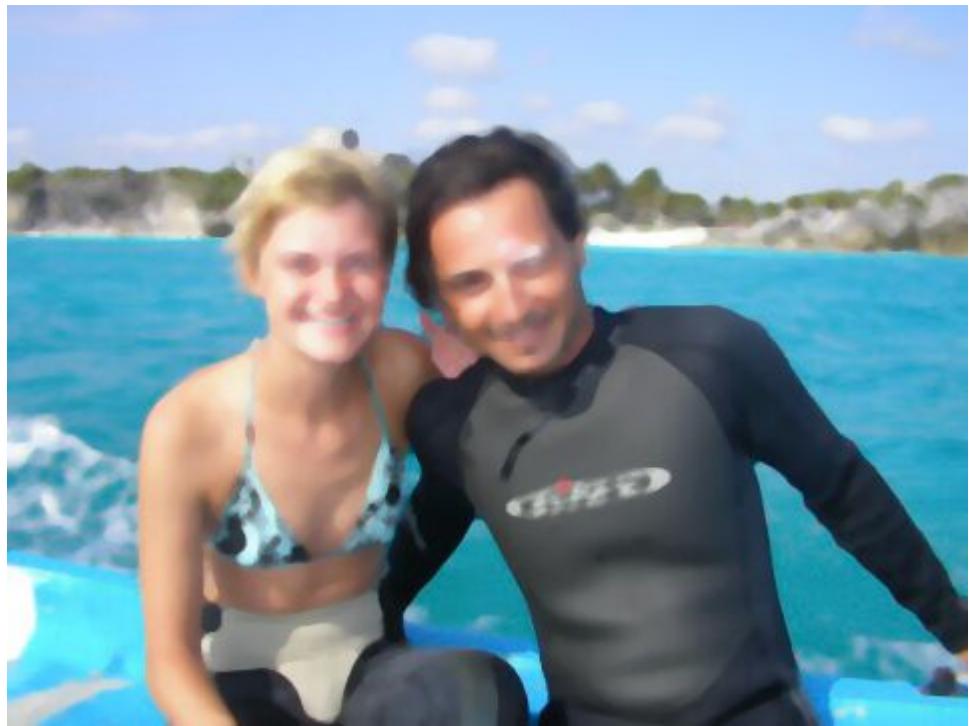


## MAP3

Like MAP but using 3 channels at one time.

## ***Median***

Median filter



## ***Advanced Local Contrast***

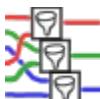
\*Still developing Phase



## MIX2

Mix 2 channels in the following modes:

- Average:  $v1*0.5+v2*0.5$   
or  $v1*p+v2*(1-p)$
- Multiply:  $v1*v2$
- Add:  $v1*+v2$
- Sub:  $v1-v2$
- Lighten v1 if  $v1>v2$ ,  $v2$  if  $v2>v1$
- Darker  $v1$  if  $v1<v2$ ,  $v2$  if  $v2<v1$
- Screen (Dodge):  $1-(1-a)*(1-b)$
- Overlay: if  $a<0.5$   $2*a*b$ , else  $1-2*(1-a)*(1-b)$
- Hard Light = Overlay
- Soft Light (see wiki blending modes) as Cairo
- Color Dodge
- Color Burn
- Linear Dodge
- Linear Burn
- Linear Light
- Pin Light
- Abs Diff.
- Exclusion



## MIX2x3

Like Mix2 but on 3+3 channels. (Is like to have 3 Mix2)



## MIX3

Mix 3 channels

Modes are

- Average:  $(v1*+v2+v3)/3$
- Average Ex.  $v1*P1+V2*P2+v3*P3$ , where  $P1+P2+P3=1$
- Sum:  $(v1*+v2+v3)$



## **Morpho: Morphological Erosion, Dialtion, Opening, Closing**



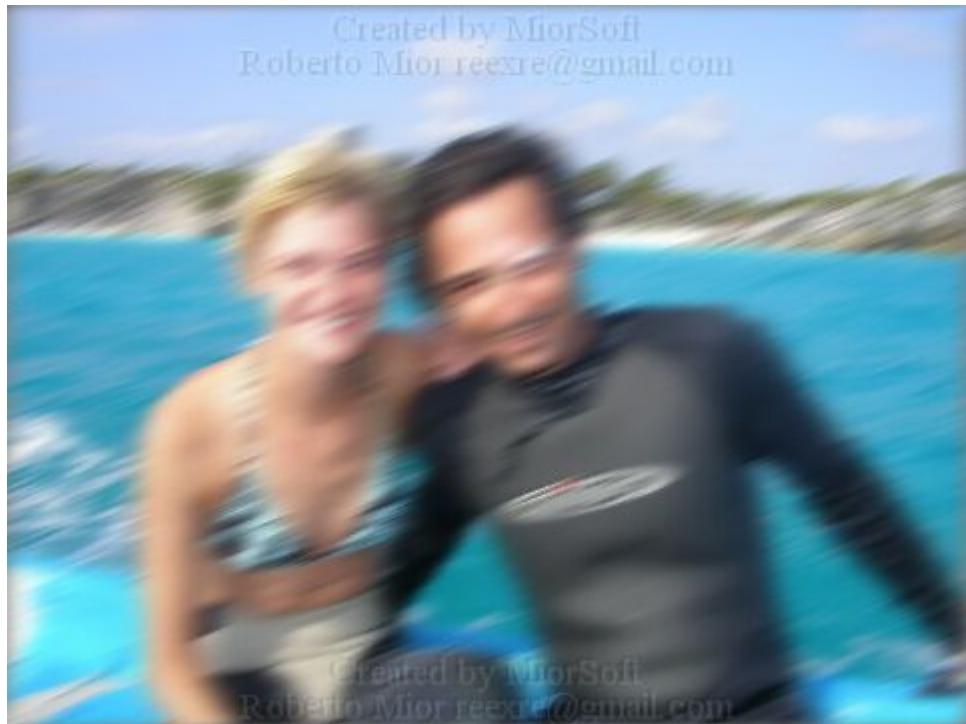
Created by MiorSoft  
Roberto Mior reexre@gmail.com



Created by MiorSoft  
Roberto Mior reexre@gmail.com



## **MTBLUR – Motion Blur**



Multiply



## **MUL**

Multiply by a given value



## **MUL3**

Multiply 3 channels by a given value.



## **NOISE**

Fractional Brownian Motion (mixed)



### ***NOISER (Deformer)***

Deform by Noise



## **Normalize**

Change global mean and variance to defined values.

Mean <-> Brightness

varianxce<->Contrast

## ***Normalize3***

Like Normalize but on 3 channels



## ***LocalNorm***

Like Normalize but locally

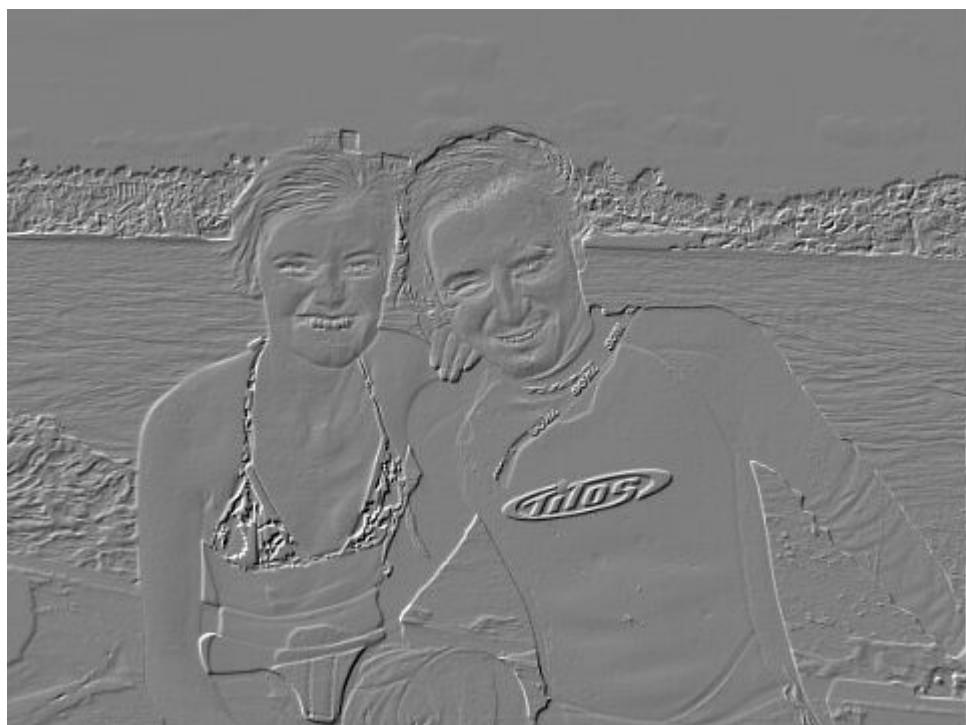


### **OFFSET (3)**

Offset whole image by given Horizontal / Vertical Percentage



Can be used to create Emboss effect (By Offset 1,1 pixel). Look Project Emboss.txt:





### ***OilPaint***

Classic oil paint effect



### ***OilPaint3***

Classic oil paint effect (3 Channels)



### ***OTSU***

Nobuyuki Otsu Multi-level Thresholding

2 Levels:



3 Levels:



4 Levels:



5 Levels:





## Local OTSU

Local Nobuyuki Otsu Multi-level Thresholding





## **PAINT**

Paints along FLOW



## **Pixelate**



## **POW**

Standard Power :  $Y=X^P$



## **POW3**

Apply a power function on 3 Channels.



## **POWex [extended Power]**

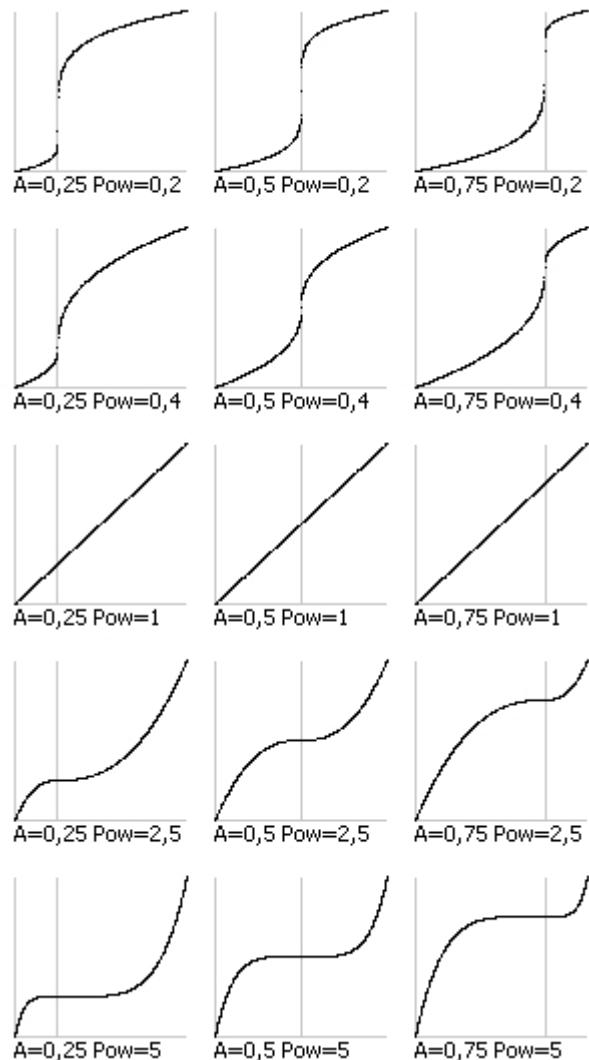
Perform a "special" kind of Power based on Average value or 50 (0.5)

It works so:

Let's call A the AVG or the given value

In Case of Input Greater than A

$$OUT = (((Input - A) / (1 - A))^{POW}) * (1 - A) + A$$



else, if Input is Smaller than A

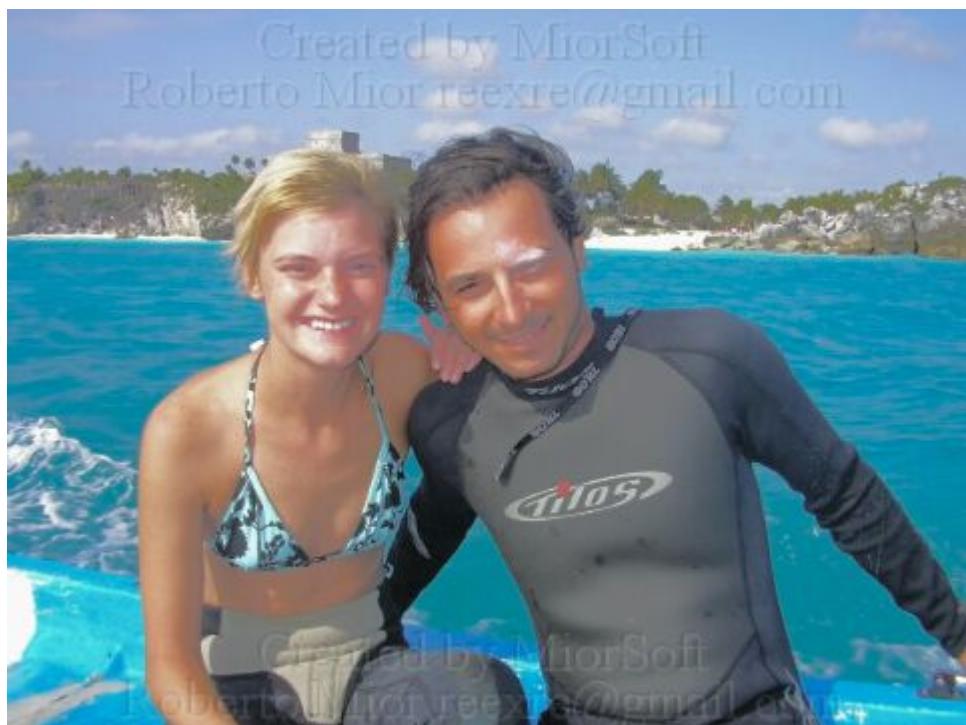
$$OUT = A - A * ((A - Input) / A)^{POW}$$

Applied on Luminance Channel:

Pow=0.5



Pow=2



### ***POWex3 [extended Power]***

Extended Power on 3 channels



## PYRAMID (Details)

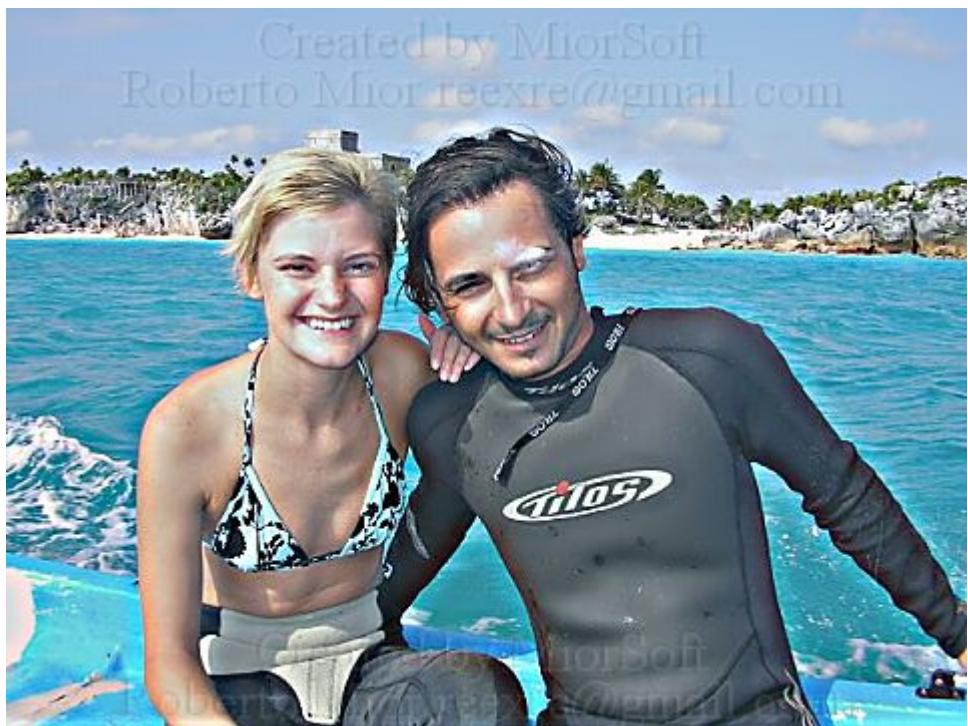
Laplacian Pyramid Level-Detail enhancement/reduction

HCY, only luminance



RGB

Created by MiorSoft  
Roberto Mior reexe@gmail.com



## QUANTIZE

Simple quantization

ORIGINAL



Grayscale uniform quantization 2



Grayscale HISTOGRAM BASED quantization 2

in this case (Histogram based) the number of white pixels is equal to the number of black pixels



Grayscale uniform quantization 4



Grayscale HISTOGRAM BASED quantization 4

in this case (Histogram based) each one of the 4 levels has the same number of pixels



Project Quantize-8Colors.txt

2 levels for each channel (RGB) =  $2 \times 2 \times 2 = 8$  Colors



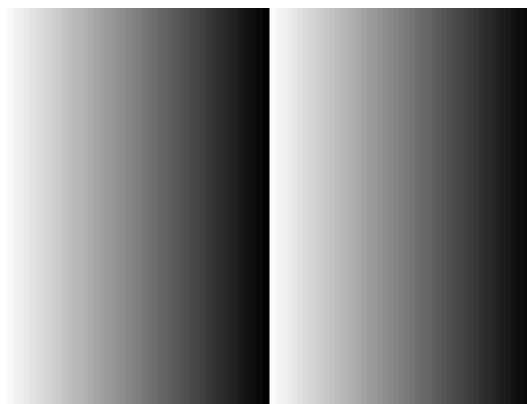
## RAMP / Gradient

Gradient Ramp

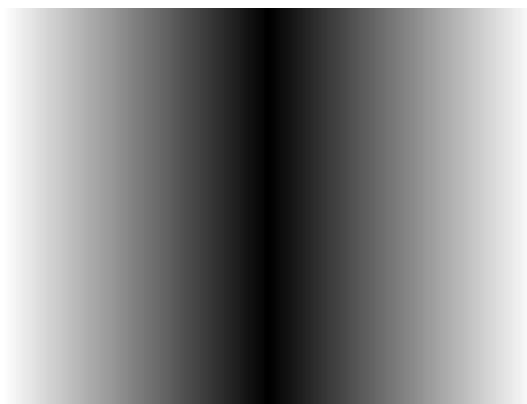
LEFT-RIGH



LEFT-RIGH – 2



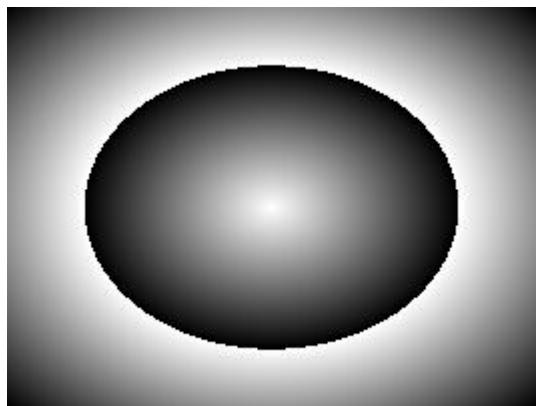
LEFT-RIGH – 2 \*



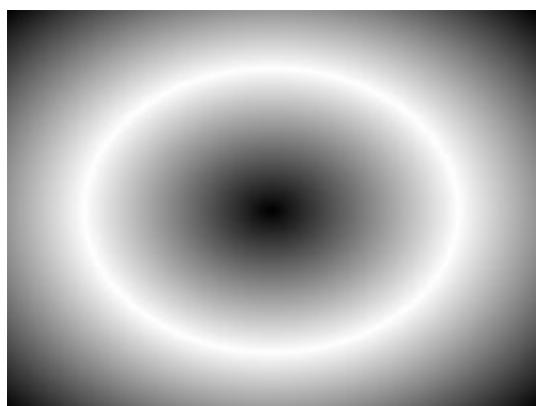
CONE UP



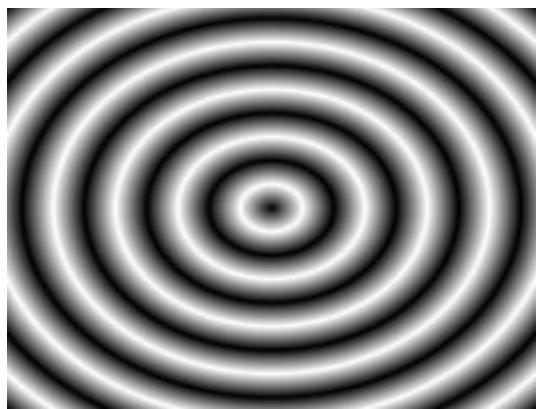
CONE UP 2



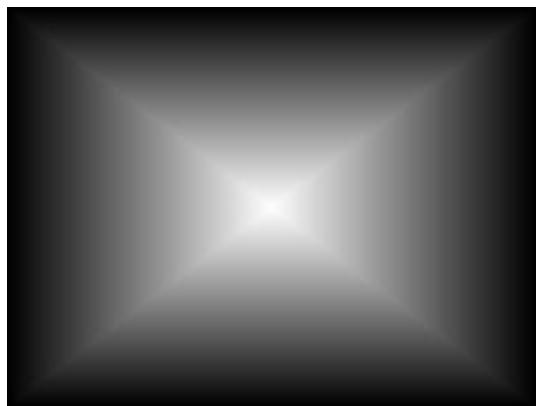
CONE UP 2 \*



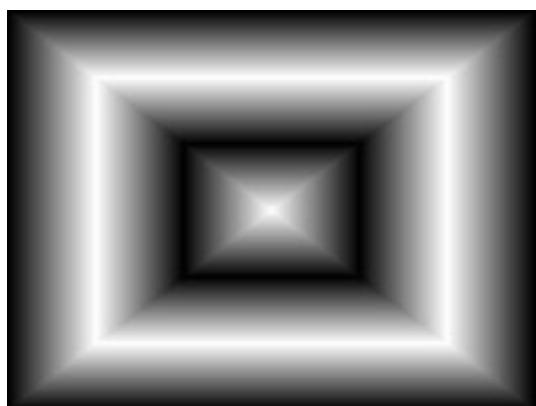
CONE UP 12 \*



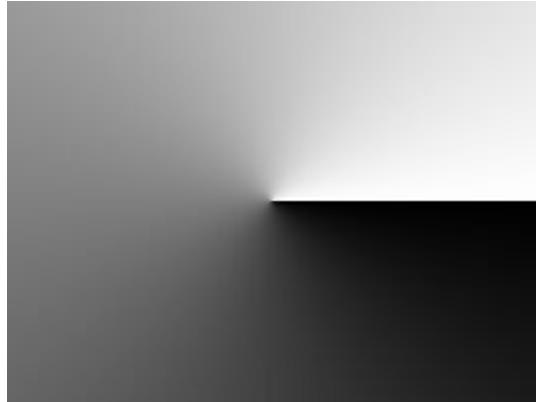
PYRAMID UP



PYRAMID UP 3\*



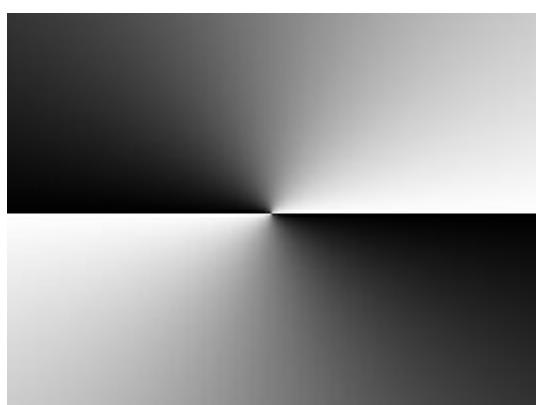
AUGER RIGHT



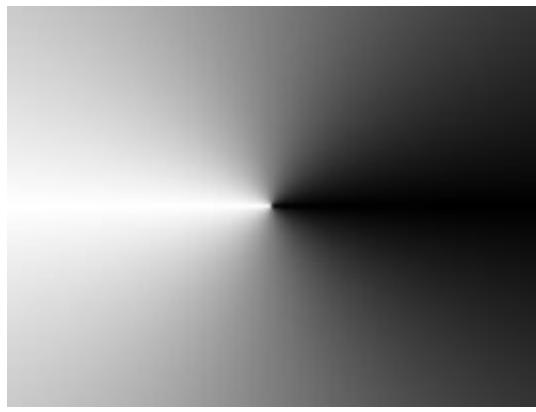
AUGER LEFT



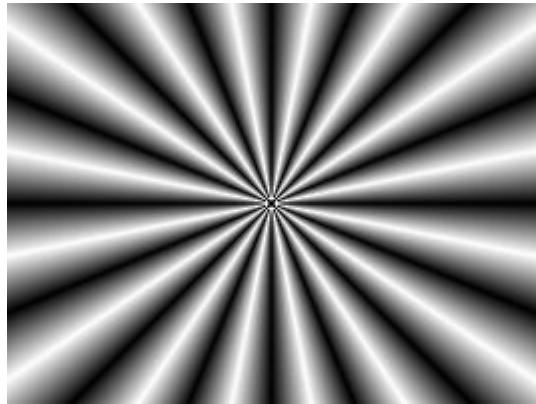
AUGER RIGHT 2



AUGER RIGHT 2 \*



AUGER RIGHT 32 \*



### ***Render1***

Draw 2nd channel (Foreground) to the 1st Input (Background) at a given position and size.



## Render3

Draw 2nd triplet of inputs (Foreground) to the 1st triplet (Background) at a given position and size.



Warhol:





## **RenderEX**

Draw 2nd channel (Foreground) to the 1st Input (Background) at given 4 CORNERS position.



## **Render3EX**

Draw 2nd triplet of inputs (Foreground) to the 1st triplet (Background) at given 4 CORNERS position.



## **RGBtweak**

Add or subtract Values from separated RGB channels

(Output values Clamped = 0-1)



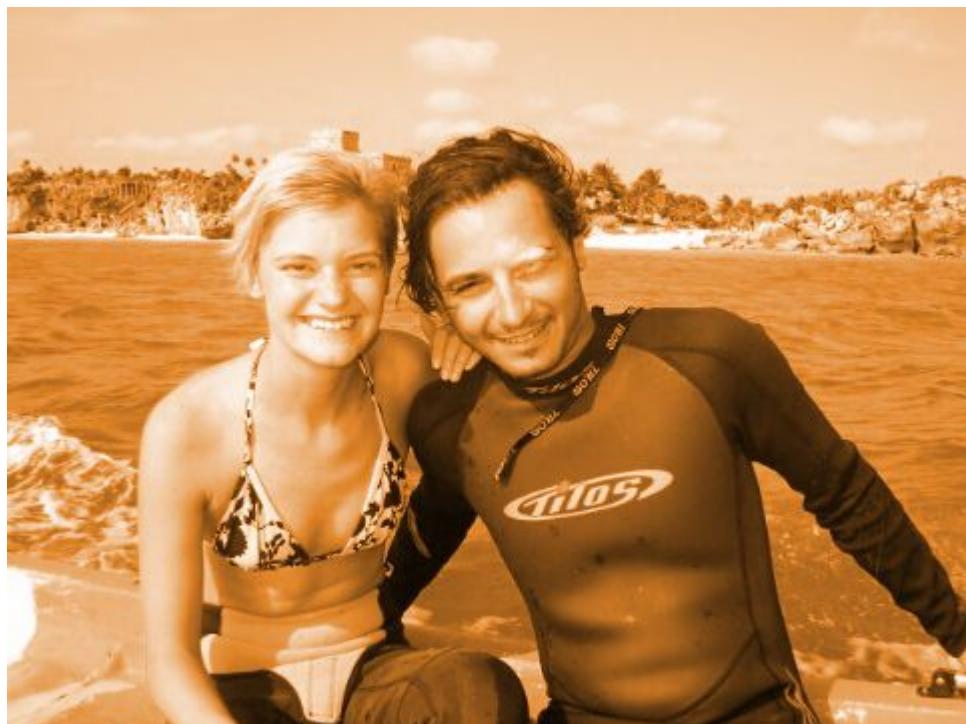
## **SEPIA**

Vintage spia effect

It's of 2 types:

3 RGB in, 3 RGB out

1 Gray in, 3 RGB out (Sepia [from] Gray)





## Scratches

Vertical scratches to simulate old film degradation



Combining Noise, Scratches, Borders and Sepia:

[See Project OLDFilm.txt]



## ***SHIFT***

Add or subtract Value to a single channel.

Output Values "Rotated":

<0 eg -0.2 ---> 0.8

>1 eg 1.1 -----> 0.1



## ***SHOCK***

Shock Filter

\*Still developing Phase



## Size 2X

Enlarge by 2 the width and height



## **Size Half**

Shrink by 2 the width and height

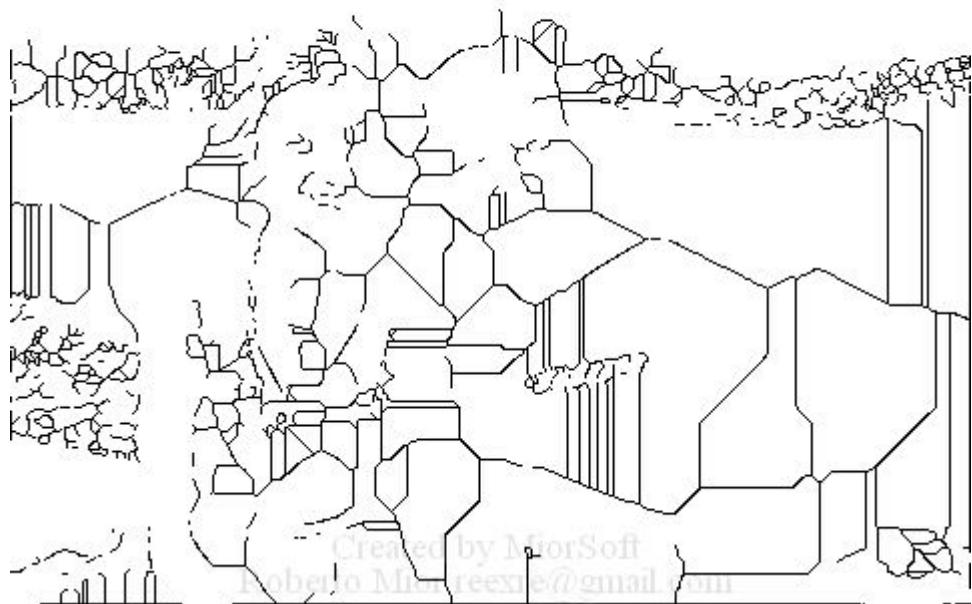
Use it carefully (start width and height must be multiple of 2)

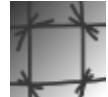




## Skeleton: Morphological Skeleton

Created by MiorSoft  
Roberto Mior reexxe@gmail.com





## SKETCH

Special kind of "pencil"-Style sketch.

Only Edges:



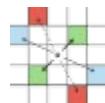
Edges and background:





## **Smooth Step**

Smooth Step



## **SNN**

SNN (1D) - Symmetric Nearest Neighbour Smoothing filter

## **SNN3**

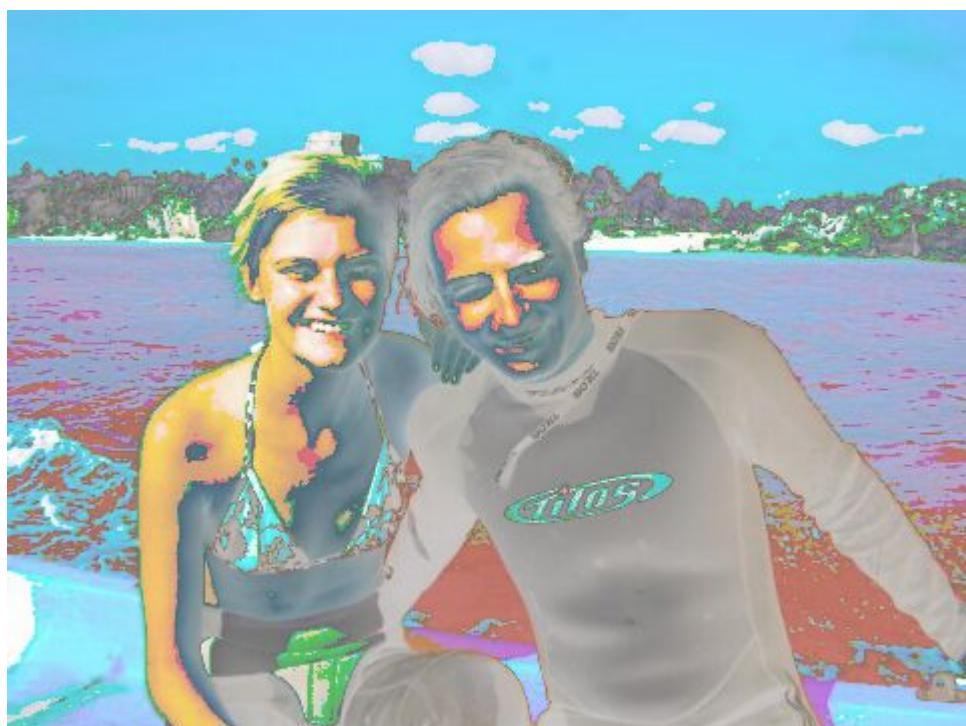
SNN (3D) - Symmetric Nearest Neighbour Smoothing filter applied to 3 channel sseparately

## **Solarize**

Classic Solarize Effect

## **Solarize3**

Classic Solarize Effect (3 Channels)

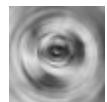




## ***Sorting***

Vertical pixel sorting





## ***SpinBLUR***

Sping Blur (Also called Radial Blur)





## ***SpinBLUR3***

Sping Blur (Also called Radial Blur) (3 channels)



## ***Split***

Vertical/Horizontal Half Split (Useful for Stereo Images)



## ***Split3***

Vertical/Horizontal Half Split (Useful for Stereo Images) (3 Channels)



## ***STEREO***

Stereo Anaglyph.

Create 3D image visible with glasses with Red filter over Left eye and Cyan filter over Right.

STANDARD  
DEVIATION

## ***StdDEV***

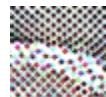
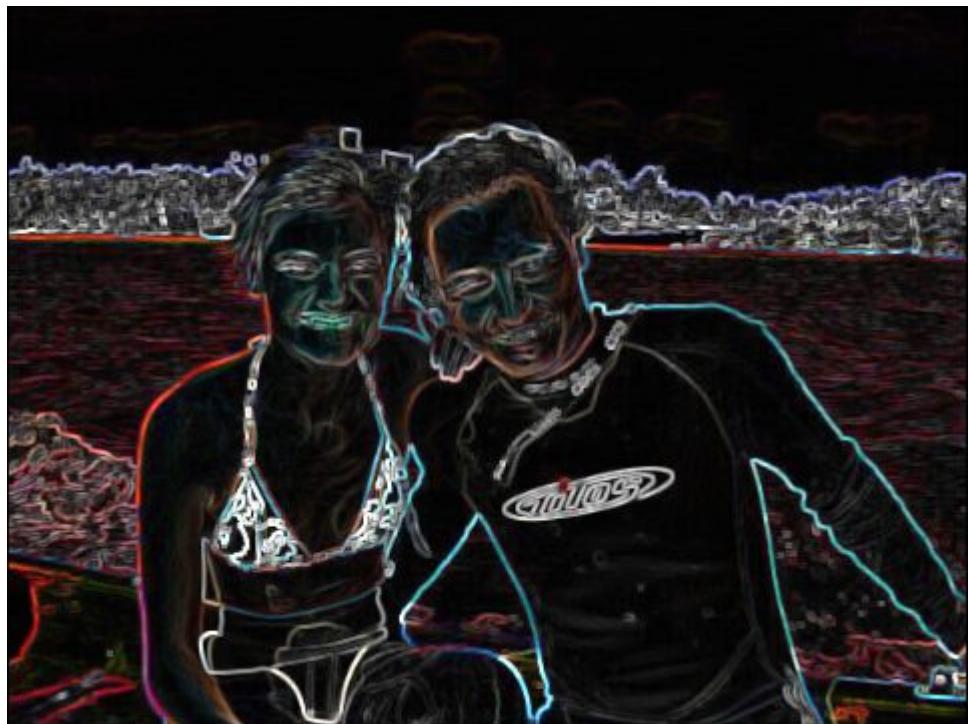
Standard Deviation 1D



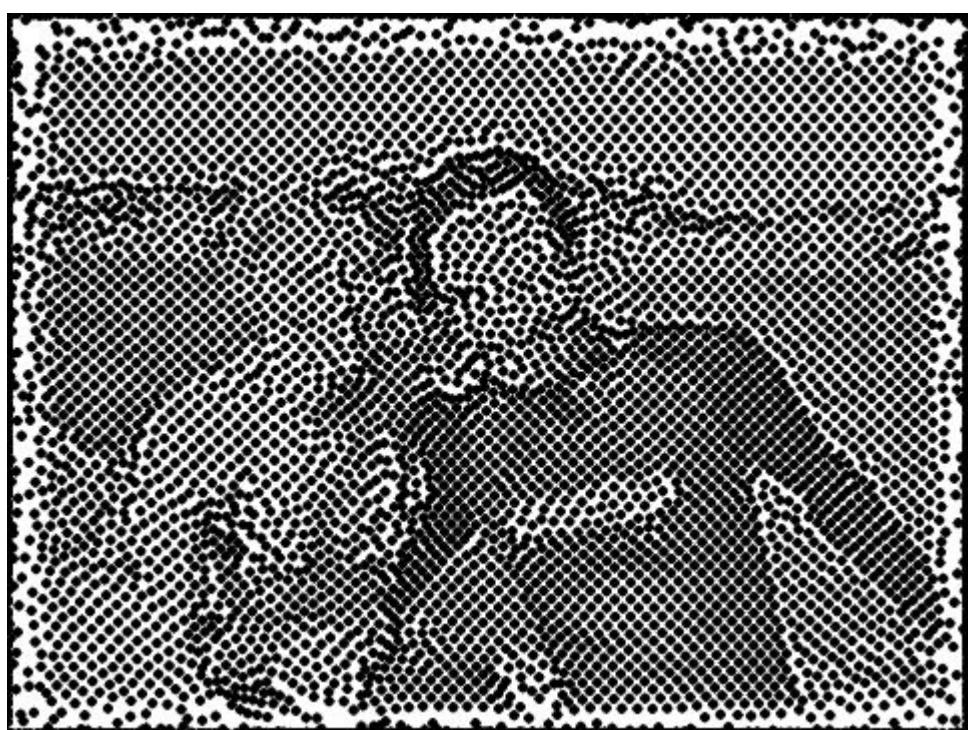
STANDARD  
DEVIATION  
**3**

## ***StdDEV3***

Standard Deviation 3 channels

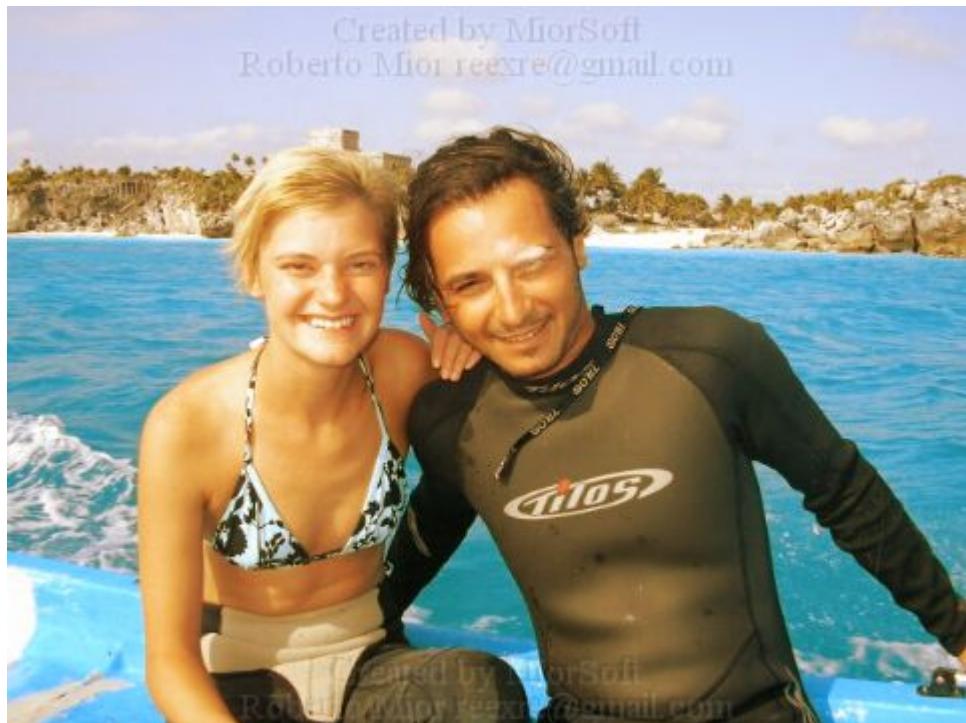


*Stipple*





**Temp.: Temperature**



## ***Thinning***

Zhang Suen Thinning (Usually it's better to apply Otsu thresholding before) [Similar to Skeleton-Node]



## ***LocalThr***

Local ***Imocho Singh*** threshold



## **ThrBLUR: - Threshold BLUR**

Apply blur only to Pixels with values near to central one value

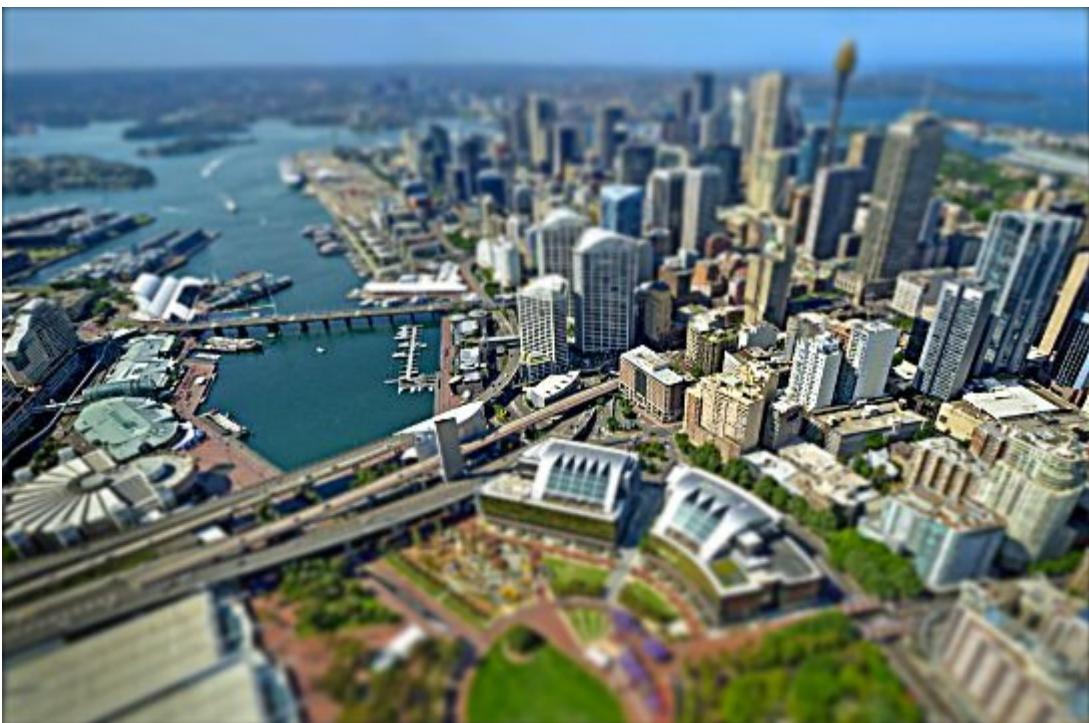




## ***Tilt-Shift***

Fake Miniature

Original and Miniaturized:





## UNSHARP MASK

Unsharp mask filter.

Applied to Luminance Channel



All channels (RGB)



### **VALUE (K)**

A Constant value

Only output



### **VALUE3**

3 Constant values (Only outputs)

# V

**VIBRANCE**





## VRLCN - Variable Radius Local Contrast Normalization

Original



Examples with different Source Amount:



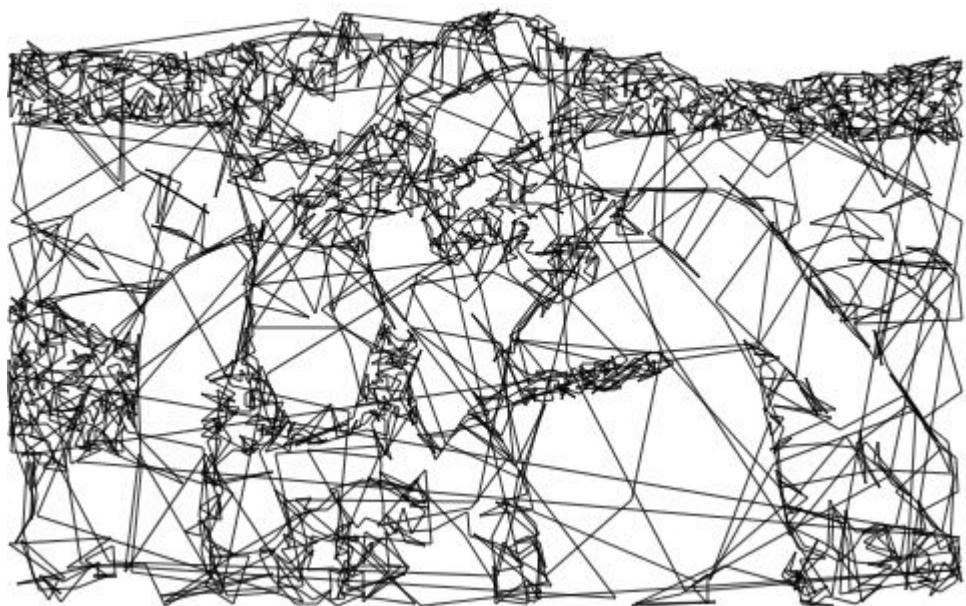
**V2**

\*Still developing Phase



**xMESH**

A "Mesh" effect

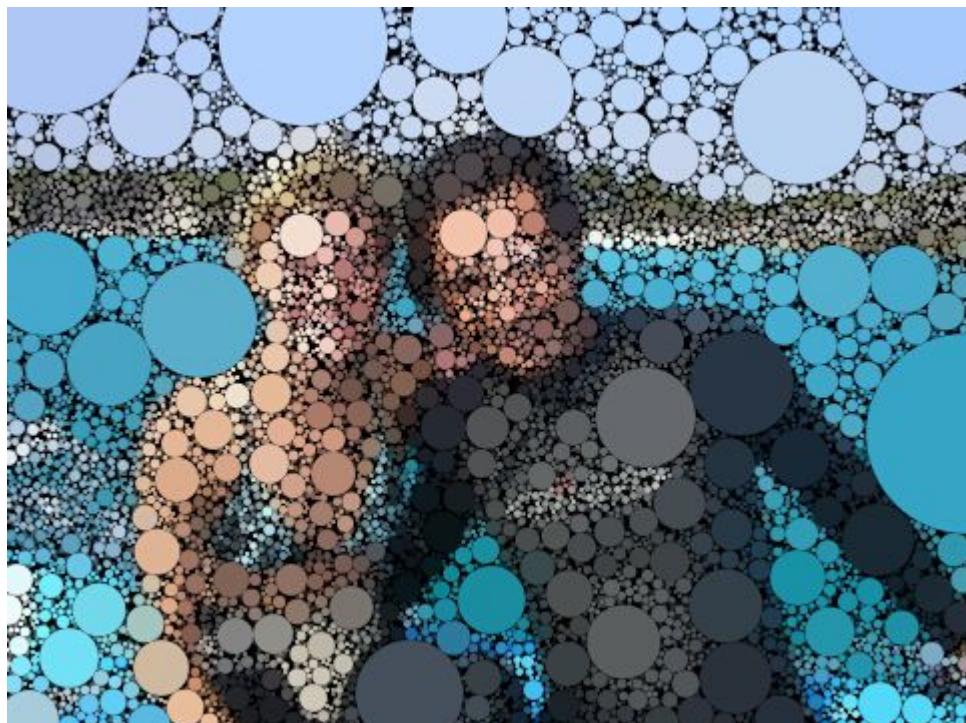


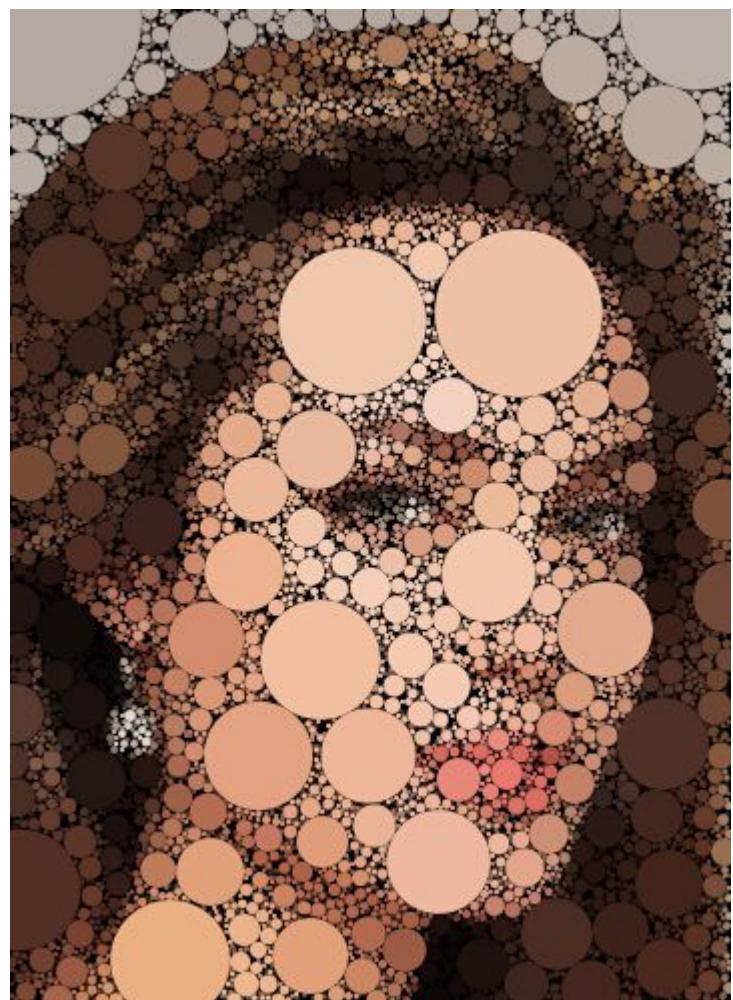


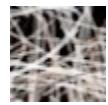
## xPOIS

A very nice Pois effect.

Output image is created by filling it with Pois (Circles) of different size and colors:



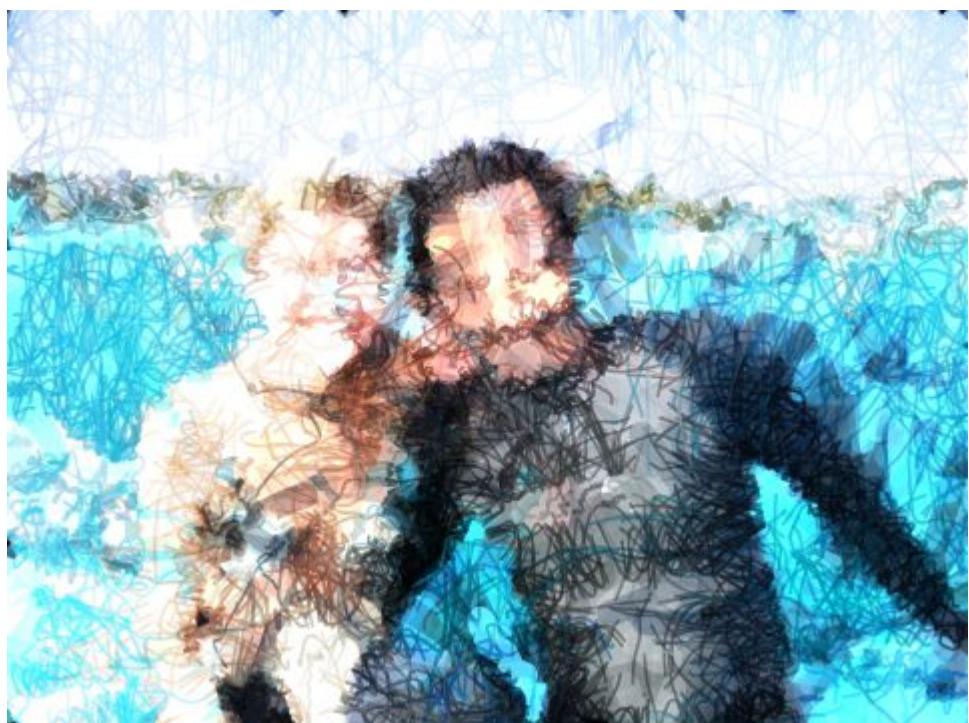


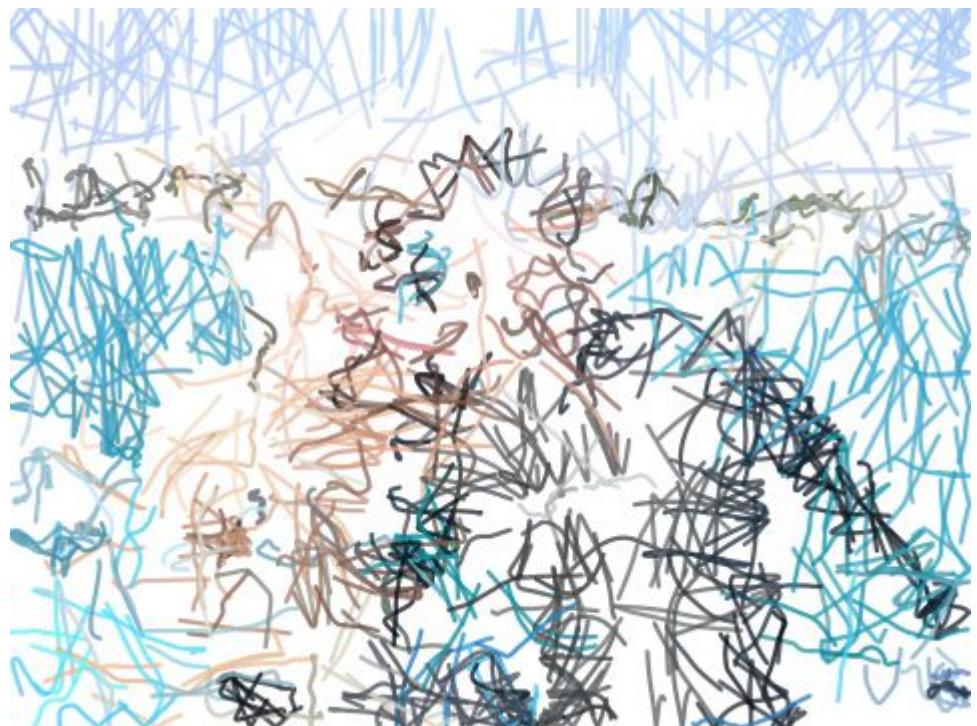


## STROKES

A very cool strokes-style paint effect:









## ZMBLUR – Zoom Blur



Created by MiorSoft  
Roberto Mior reexre@gmail.com

Created by MiorSoft  
Roberto Mior reexre@gmail.com

A better explaination of the Effects/filters will be updated in further versions...

Don't esitate to write for suggestions or feature request such as new Node/Fxs or any kind of feedback...

Hope to find people interested in this project, with the will to see it improved and who would be happy to help with some donation.

CONTACT: [reexre@gmail.com](mailto:reexre@gmail.com)