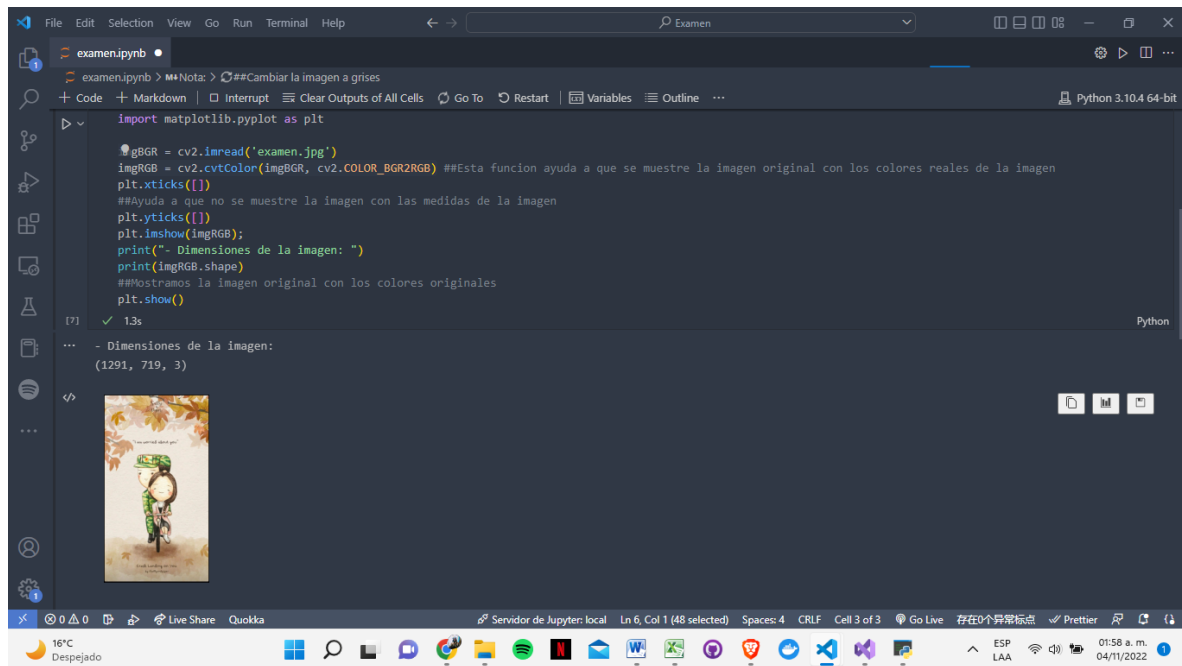


Elaborado por: Damián Elizondo Lizeth Abigail y sus lágrimas de madrugada :’(

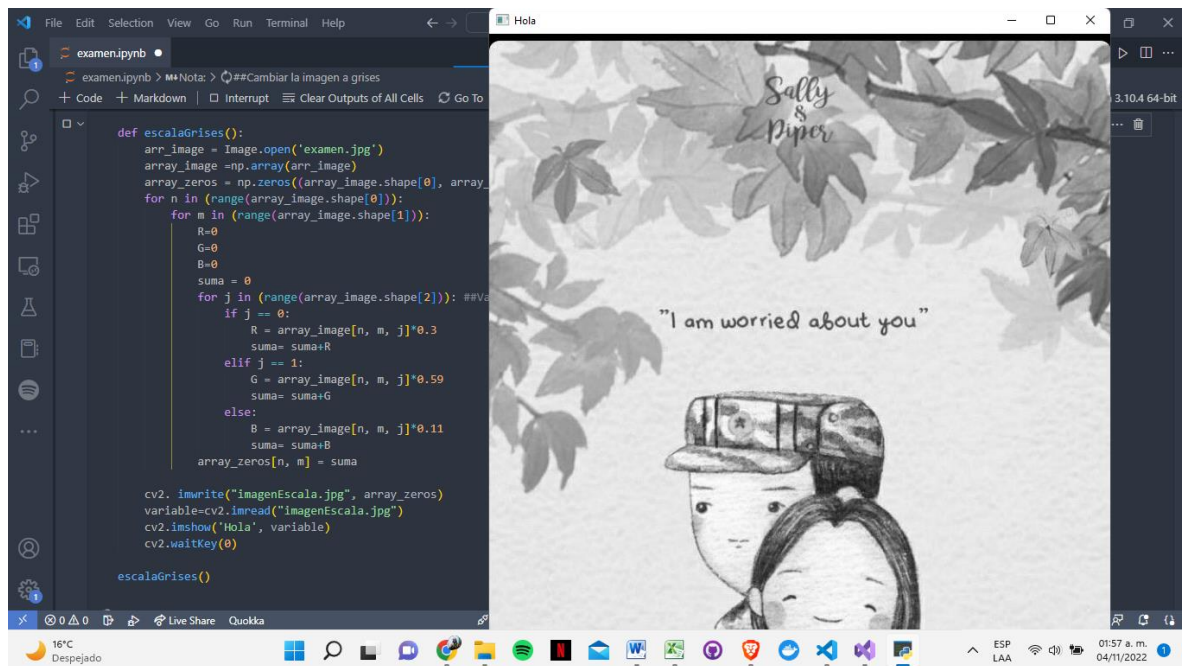
Visión Artificial 5BV1

Examen Primer Parcial

A continuación podemos observar los diferentes resultados de los filtros aplicados, la tecnología usada fue Python y C++



En esta primera imagen se muestra la imagen original a color



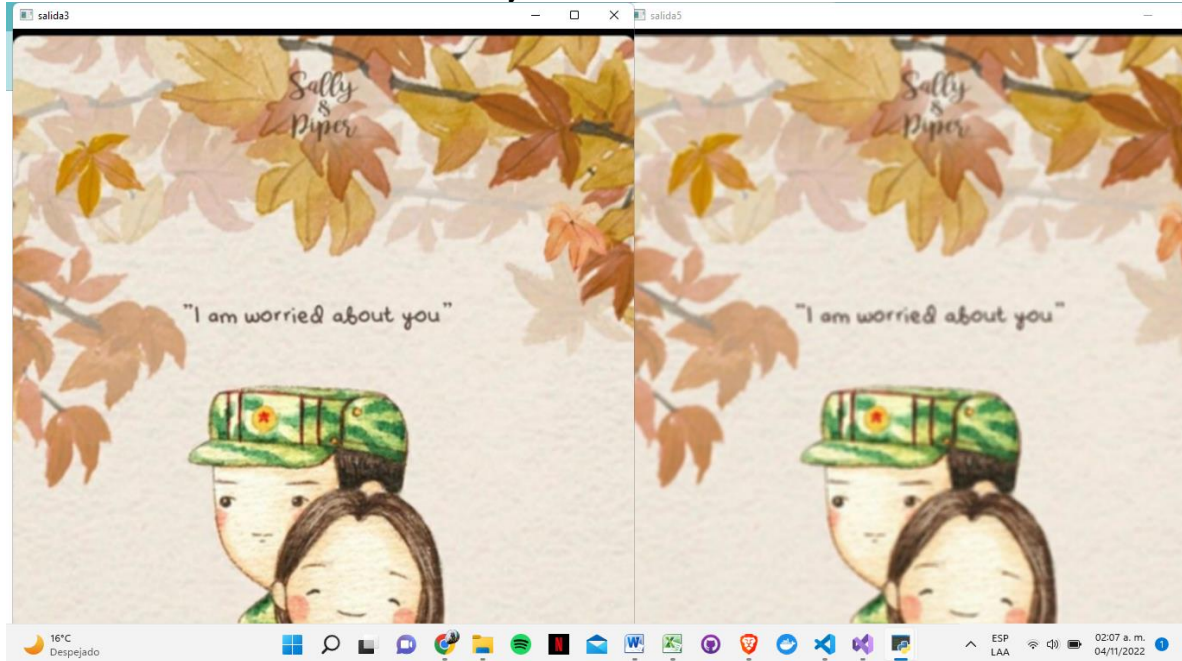
En esta segunda imagen podemos ver la imagen en escala de grises

Elaborado por: Damián Elizondo Lizeth Abigail y sus lágrimas de madrugada :’(

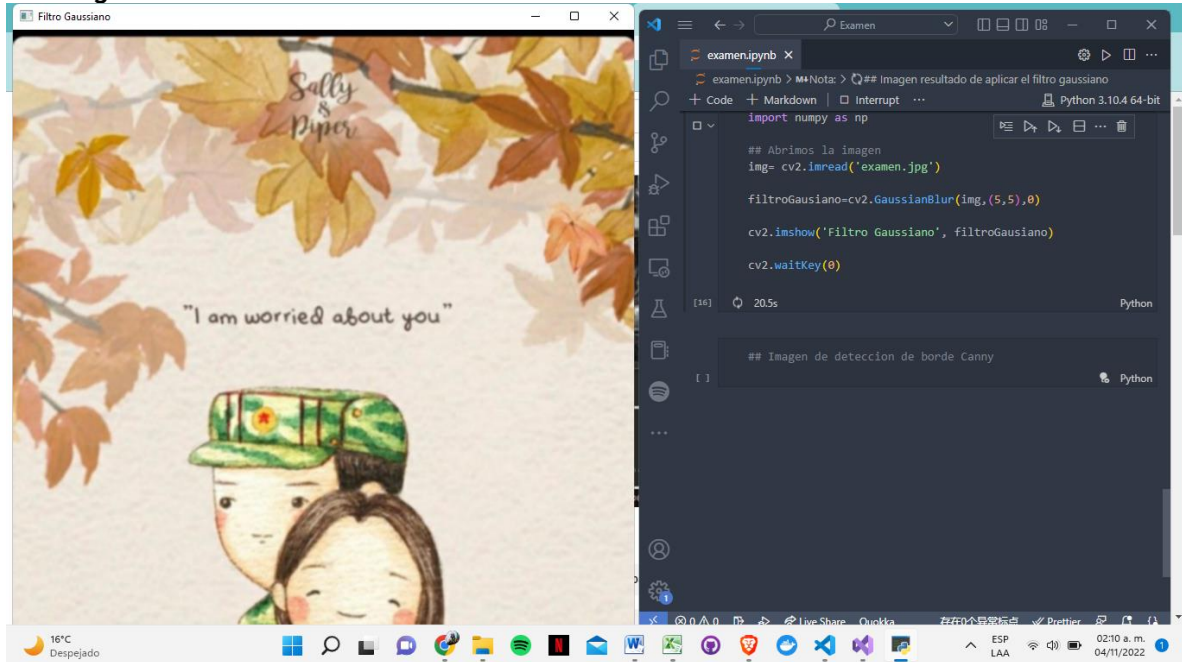
Visión Artificial 5BV1

Examen Primer Parcial

Filtro suavizado con kernel de 3x3 y de 5x5



Filtro gaussiano



Elaborado por: Damián Elizondo Lizeth Abigail y sus lágrimas de madrugada :’(

Visión Artificial 5BV1

Examen Primer Parcial

Detección de bordes con Canny y con Sobel respectivamente, se puede observar que Canny tiene una mejor detección de bordes, además de que muestra la imagen sin tanto ruido.

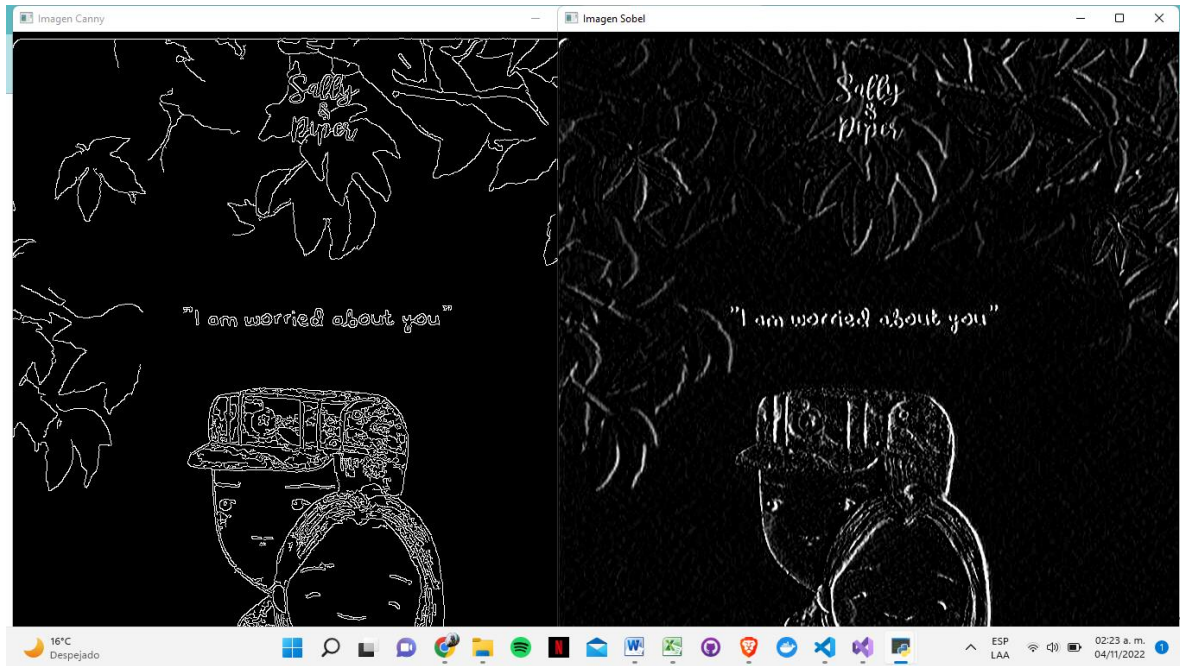
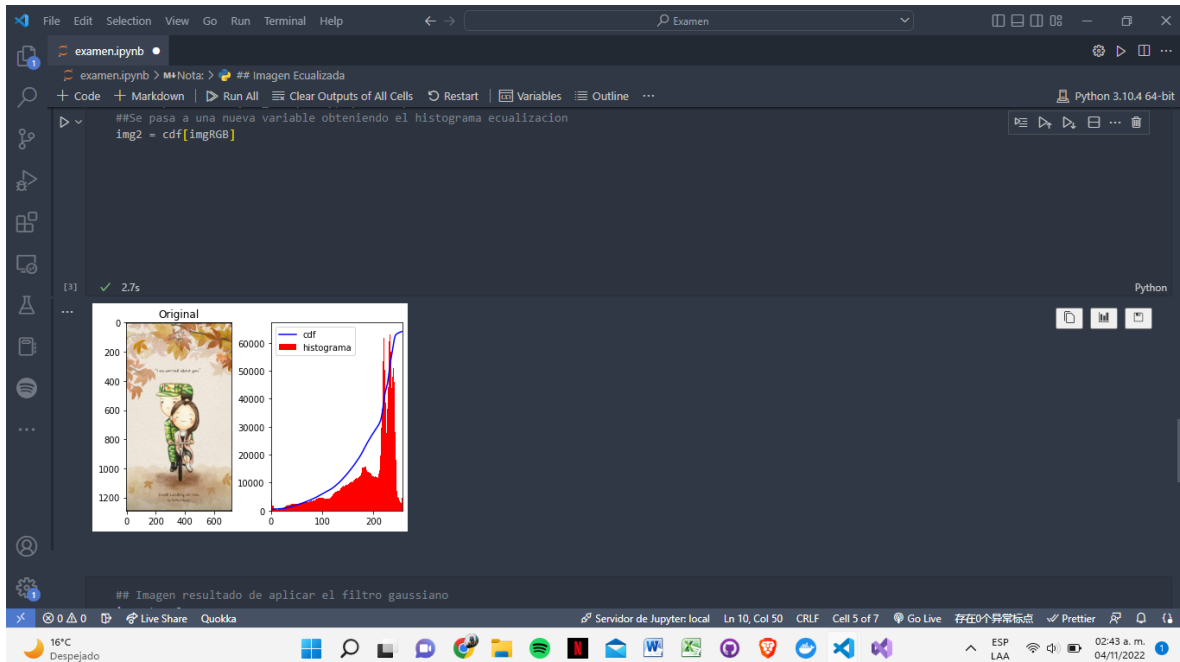


Imagen ecualizada

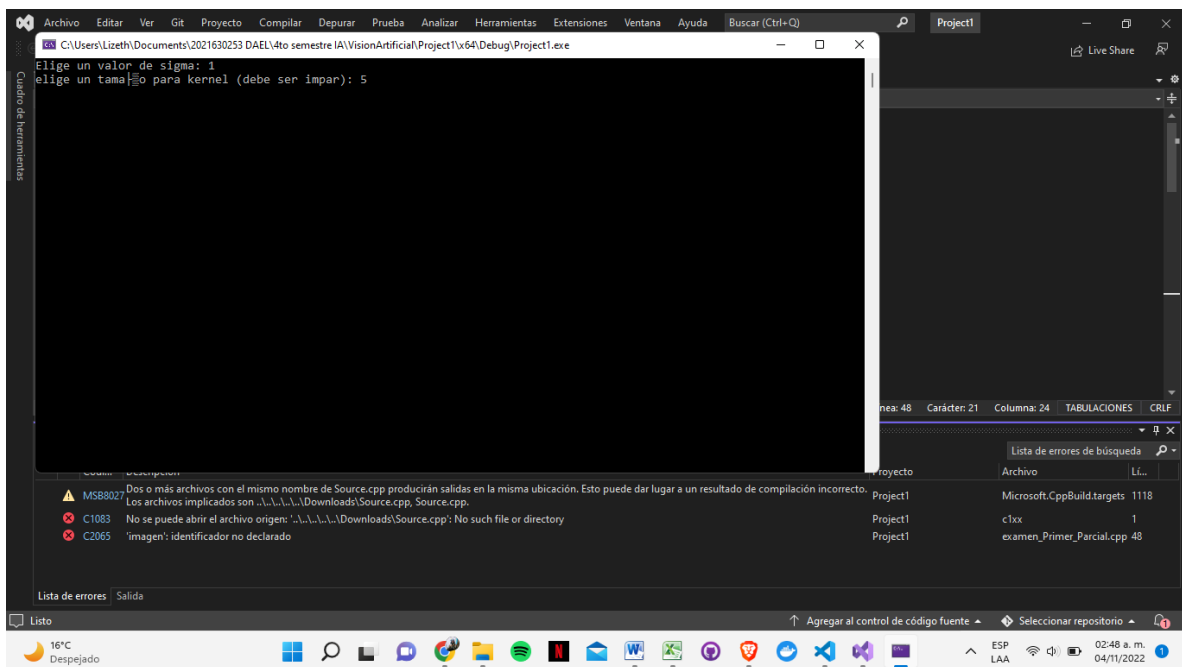


Elaborado por: Damián Elizondo Lizeth Abigail y sus lágrimas de madrugada :’(

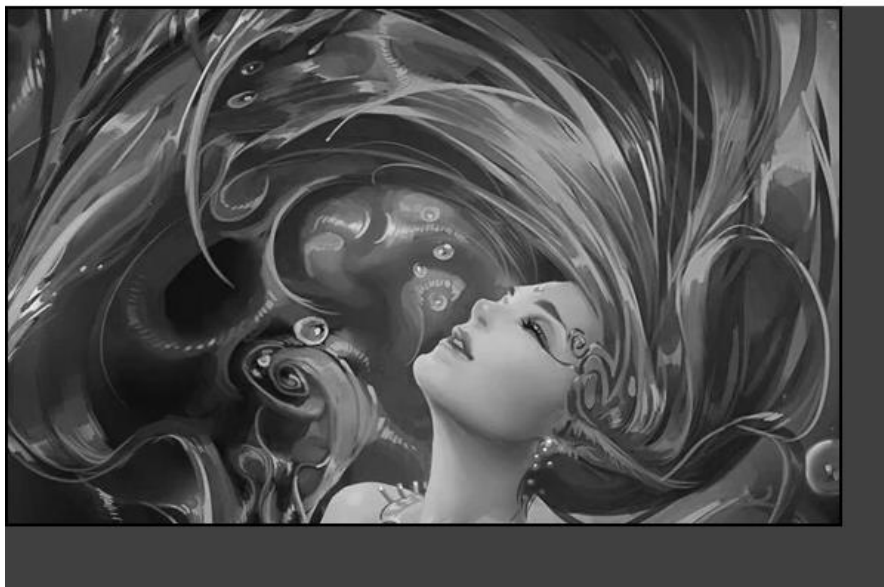
Visión Artificial 5BV1

Examen Primer Parcial

Generacion del kernel dinamico en C++ En visual 2022 y muestra de la imagen original en esacala de grises y de la imagen con los bordes aumentados



Lena Moderna



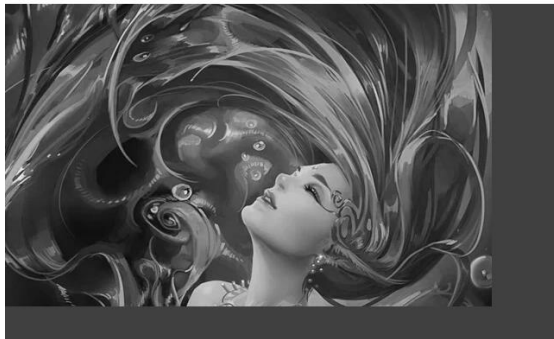
Elaborado por: Damián Elizondo Lizeth Abigail y sus lágrimas de madrugada :’(

Visión Artificial 5BV1

Examen Primer Parcial

```
C:\Users\Lizeth\Documents\2021630253 DAEL\4to semestre IA\VisionArtificial\Project1\vc64\Debug\Project1.exe
Elige un valor de sigma: 1
elige un tamaño para kernel (debe ser impar): 5
0.00291502 0.0130642 0.0215393 0.0130642 0.00291502
0.0130642 0.0585498 0.0965324 0.0585498 0.0130642
0.0215393 0.0965324 0.159155 0.0965324 0.0215393
0.0130642 0.0585498 0.0965324 0.0585498 0.0130642
0.00291502 0.0130642 0.0215393 0.0130642 0.00291502
[ INFO:004.731] global c:\build\master_winpack-build-win64-vc15\opencv\modules\core\src\parallel\registry_parallel.impl.
hpp (96) cv::parallel::ParallelBackendRegistry::ParallelBackendRegistry core(parallel): Enabled backends(3, sorted by pr
iority): ONETBB(1000); TBB(990); OPENMP(980)
[ INFO:004.732] global c:\build\master_winpack-build-win64-vc15\opencv\modules\core\src\utils\plugin_loader.impl.hpp (67
) cv::plugin::impl::DynamicLib::libraryLoad load C:\Users\Lizeth\Desktop\opencv\build\x64\vc15\bin\opencv_core_parallel_
onetbb455_64d.dll => FAILED
[ INFO:004.736] global c:\build\master_winpack-build-win64-vc15\opencv\modules\core\src\utils\plugin_loader.impl.hpp (67
) cv::plugin::impl::DynamicLib::libraryLoad load opencv_core_parallel_onetbb455_64d.dll => FAILED
[ INFO:004.737] global c:\build\master_winpack-build-win64-vc15\opencv\modules\core\src\utils\plugin_loader.impl.hpp (67
) cv::plugin::impl::DynamicLib::libraryLoad load C:\Users\Lizeth\Desktop\opencv\build\x64\vc15\bin\opencv_core_parallel_
tbb455_64d.dll => FAILED
[ INFO:004.742] global c:\build\master_winpack-build-win64-vc15\opencv\modules\core\src\utils\plugin_loader.impl.hpp (67
) cv::plugin::impl::DynamicLib::libraryLoad load opencv_core_parallel_tbb455_64d.dll => FAILED
[ INFO:004.743] global c:\build\master_winpack-build-win64-vc15\opencv\modules\core\src\utils\plugin_loader.impl.hpp (67
) cv::plugin::impl::DynamicLib::libraryLoad load C:\Users\Lizeth\Desktop\opencv\build\x64\vc15\bin\opencv_core_parallel_
openmp455_64d.dll => FAILED
[ INFO:004.749] global c:\build\master_winpack-build-win64-vc15\opencv\modules\core\src\utils\plugin_loader.impl.hpp (67
) cv::plugin::impl::DynamicLib::libraryLoad load opencv_core_parallel_openmp455_64d.dll => FAILED
filas: 352
columnas: 566
[ INFO:004.812] global c:\build\master_winpack-build-win64-vc15\opencv\modules\highgui\src\registry.impl.hpp (114) cv::h
ighgui_backend::UIBackendRegistry::UIBackendRegistry UI: Enabled backends(4, sorted by priority): GTK(1000); GTK3(990);
GTK2(980); WIN32(970) + BUILTIN(WIN32UI)
```

Lena Moderna



Img. Original

```
C:\Users\Lizeth\Documents\2021630253 DAEL\4to semestre IA\VisionArtificial\Project1\vc64\Debug\Project1.exe
[ INFO:004.022] global c:\build\master_winpack-build-win64-vc15\opencv\modules\core\src\utils\plugin_loader.impl.hpp (67
) cv::plugin::impl::DynamicLib::libraryLoad load C:\Users\Lizeth\Desktop\opencv\build\x64\vc15\bin\opencv_core_parallel_
openmp455_64d.dll => FAILED
[ INFO:004.025] global c:\build\master_winpack-build-win64-vc15\opencv\modules\core\src\utils\plugin_loader.impl.hpp (67
) cv::plugin::impl::DynamicLib::libraryLoad load opencv_core_parallel_openmp455_64d.dll => FAILED
filas: 350
columnas: 564
[ INFO:004.071] global c:\build\master_winpack-build-win64-vc15\opencv\modules\highgui\src\registry.impl.hpp (114) cv::h
ighgui_backend::UIBackendRegistry::UIBackendRegistry UI: Enabled backends(4, sorted by priority): GTK(1000); GTK3(990);
GTK2(980); WIN32(970) + BUILTIN(WIN32UI)
[ INFO:004.071] global c:\build\master_winpack-build-win64-vc15\opencv\modules\core\src\utils\plugin_loader.impl.hpp (67
) cv::plugin::impl::DynamicLib::libraryLoad load C:\Users\Lizeth\Desktop\opencv\build\x64\vc15\bin\opencv_highgui_gtk455
64.dll => FAILED
[ INFO:004.074] global c:\build\master_winpack-build-win64-vc15\opencv\modules\core\src\utils\plugin_loader.impl.hpp (67
) cv::plugin::impl::DynamicLib::libraryLoad load opencv_highgui_gtk455_64.dll => FAILED
[ INFO:004.075] global c:\build\master_winpack-build-win64-vc15\opencv\modules\core\src\utils\plugin_loader.impl.hpp (67
) cv::plugin::impl::DynamicLib::libraryLoad load C:\Users\Lizeth\Desktop\opencv\build\x64\vc15\bin\opencv_highgui_gtk345
64.dll => FAILED
[ INFO:004.079] global c:\build\master_winpack-build-win64-vc15\opencv\modules\core\src\utils\plugin_loader.impl.hpp (67
) cv::plugin::impl::DynamicLib::libraryLoad load opencv_highgui_gtk345_64.dll => FAILED
[ INFO:004.081] global c:\build\master_winpack-build-win64-vc15\opencv\modules\core\src\utils\plugin_loader.impl.hpp (67
) cv::plugin::impl::DynamicLib::libraryLoad load C:\Users\Lizeth\Desktop\opencv\build\x64\vc15\bin\opencv_highgui_gtk245
64.dll => FAILED
[ INFO:004.085] global c:\build\master_winpack-build-win64-vc15\opencv\modules\core\src\utils\plugin_loader.impl.hpp (67
) cv::plugin::impl::DynamicLib::libraryLoad load opencv_highgui_gtk245_64.dll => FAILED
[ INFO:004.086] global C:\build\master_winpack-build-win64-vc15\opencv\modules\highgui\src\backend.cpp (90) cv::highgui_
backend::createUIBackend UI: using backend: WIN32 (priority=970)
[ INFO:004.086] global C:\build\master_winpack-build-win64-vc15\opencv\modules\highgui\src>window_w32.cpp (3013) cv::imp
l::Win32BackendUI::createWindow OpenCV/UI: Creating Win32UI window: Lena Moderna (1)
```