

AltaLux: new major release - Stefano Tommesani

Written by Stefano Tommesani

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AltaLux is an image processing technology that can significantly enhance the quality of images and videos with poor lighting conditions.

AltaLux/Demo is a Windows sample application that lets you enhance the quality of JPEG images for free ([download it!](#) from the download area). For even better usability, I strongly recommend using [AltaPixShare](#) as it has a vastly better interface.

For IrfanView and XnView users, you can download the AltaLux plugins for [IrfanView](#) and [XnView](#).

{swf}AltaLux|600|338|1{/swf}

The animation above shows how the AltaLux filter performs on a real photo, ranging from left (no enhancement) to right (max level of enhancement). On the original photo the palace is underexposed, it appears dark as the sky in the background is much clearer; increasing the amount of enhancement to an intermediate level takes the palace out of the dark, exposing its facade; moving the enhancement to max is too much of a good thing, as previously hidden details pop out of the screen but the scene does not appear natural at all.

Update: the new 2.5 version includes an additional setting (Scale) that changes how each zone of the image influences nearby ones. Click [here](#) for a visual explanation of how it affects filter's results.

AltaLux is an high-performing filter, due to the innovative implementation that fully exploits the capabilities of current processors (both SIMD and thread-level parallelism is exploited): being able to process well over 4 12 MPixel images per second on quad-core processors make it

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suitable for real-time enhancement of multiple video streams.

The number of possible applications is infinite:

- CCTV video security systems could use AltaLux-enhanced video streams to discover moving objects that may not be discovered otherwise, and let the user gain a deeper insight of what is happening;
- traffic monitoring in critical situations, such as dark crossroads or subways, would be greatly improved;
- quality control systems based on visual inspection could work on even more detailed images;
- and any other video-related application.

AltaLux/App can be used by both professional and non-professional users for image processing tasks without purchasing a license.

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