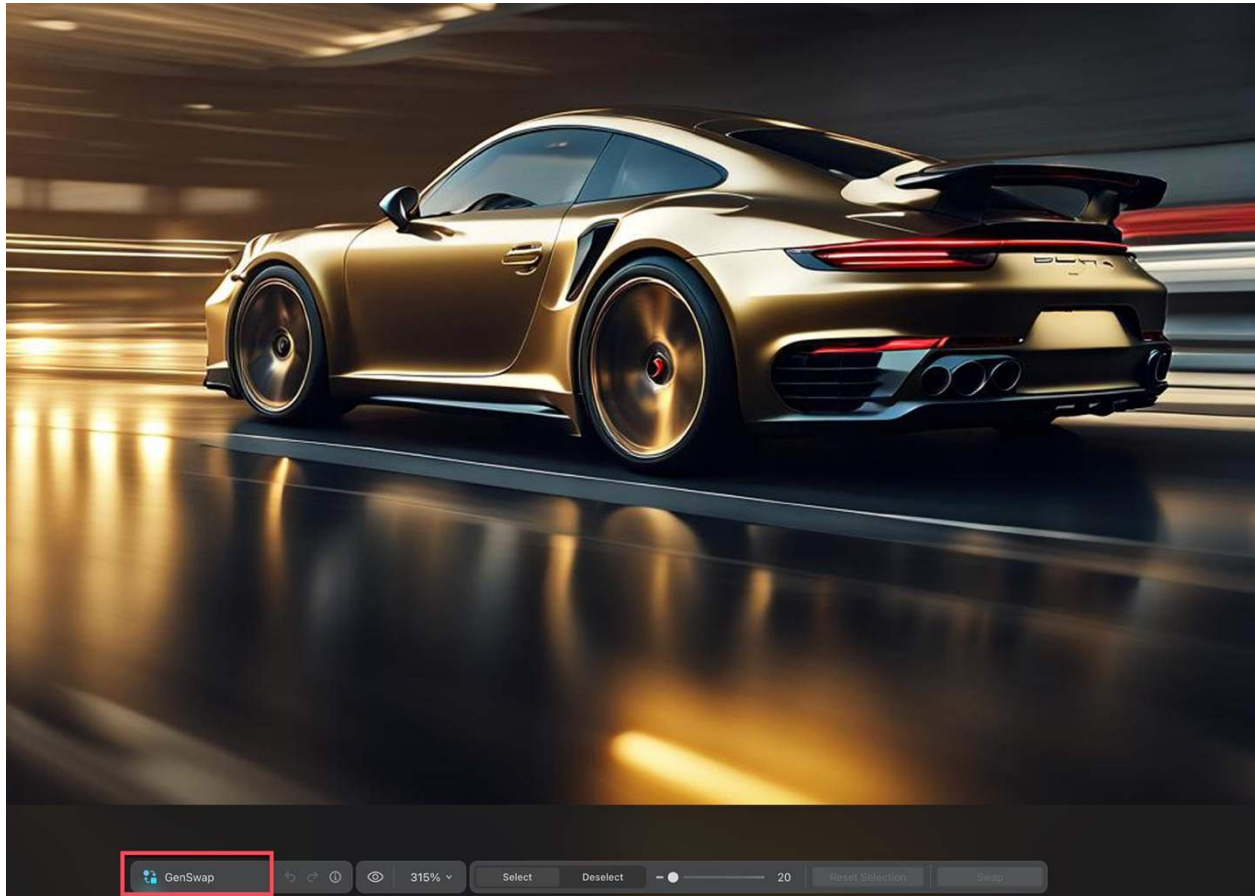


# Luminar Neo AI Pitfalls: Protecting Your Competition Eligibility

Luminar Neo (version 1.24.6)



## Introduction

The rapid advancement of AI-generative technology in photo post processing has fundamentally transformed the creative process. Luminar Neo's generative AI tools represent the application's innovation in integrating Stable Diffusion technology directly into its photo editing workflow.

Using these tools, the user can seamlessly add new components to photos or reconstruct missing areas with synthetic content that appears consistent with the existing image.

AI-generative features are only available to subscribers and Creative Journey Pass holders:

- **GenErase** – This tool allows users to remove unwanted elements from photos by analyzing the surrounding areas and seamlessly filling in the removed parts with matching textures, lighting, and details.
- **GenSwap** – This tool enables the replacement or addition of image elements within a photo using AI-generated content based on text prompts.
- **GenExpand** – This tool expands the photo canvas beyond the original frame dimensions, requiring internet access to generate new content that matches the existing image context.

These generative AI capabilities are built on the Stable Diffusion model and are integrated as specialized tools within Luminar Neo's editing environment.

## CAPA Competition Guidelines

While these three AI-generative tools offer creative possibilities, they directly contradict CAPA's competition guidelines requiring ***all image elements to originate from the photographer's original capture.***

CAPA's Eligibility Criteria specifically outline restrictions on AI tool usage. Understanding these limitations is essential for photographers seeking to ensure their submissions remain eligible for CAPA competitions:

*Images that have been created or modified using specific AI generative techniques are not permitted for submission into our competitions. This includes:*

- ***In-painting*** (where AI fills in generated elements not captured by the photographer or removes and replaces elements from a photograph with AI-generated content);
- ***Out-painting*** (where AI extends beyond the original boundaries of the photograph using generated elements);
- ***Image-to-image AI*** (where AI transforms an entire photograph based on text prompts or style references);
- ***Text-to-image*** (where images are generated from scratch based on text entered into a prompt description).

*These restrictions apply whether or not text prompts are used in the AI generation process.*

*All parts of the submitted image are the creator's original work, containing no elements produced or captured by others.*

## Luminar Neo's Dual Process Modes

Understanding how Luminar Neo's features work is crucial for maintaining completion. The application offers two distinct processing approaches:

## Local Processing Mode

- Runs entirely on your computer's hardware
- Uses existing image data for enhancements
- Does not generate new content from external sources

## Cloud-Based Stability Diffusion AI Mode

- Uses Stable Diffusion AI model and other models
- Processes images using external cloud-based AI models
- Can generate entirely new content not present in original capture

## Safe vs. Flagged Tools

### ✓ **SAFE TOOLS** (No AI-generative features)

Basic Enhancement Features:

- All standard adjustments (brightness, contrast, hue/saturation, cropping)
- Traditional filters and layer operations
- Enhanced color correction tools
- Brilliance AI tool
- Intelligent depth masking capabilities

AI-Powered Safe Tools:

- Crop AI (automatic photo composition)
- Noise AI (noise reduction)
- Supersharpen AI (refines blurred images)
- Sky AI (redefine blown out or flat skies)
- Twilight Enhancer AI (work with blue and gold hour image)
- Atmosphere AI (adding fog, mist, haze, etc...)
- Water Enhancer AI (refine and enhance water)
- Relight AI (total control of light in image)
- Magic Light AI (adjust multiple light sources)
- Portrait Bokeh AI (simulate wide open aperture – i.e. 2.0)
- Face AI (adjust – eyes, nose & mouth)
- Skin AI (enhance skin tones)
- Body AI (adjust torso and abdomen)

### ✗ **FLAGGED TOOLS**

AI-Generative Features:

- **GenErase** – Removes unwanted objects and fills in the area with AI-generated content to blend seamlessly

- **GenSwap** – Lets you replace or insert new objects via text prompts and generates corresponding pixels to match the scene
- **GenExpand** – Extends the image dimension with new elements not captured by the photographer

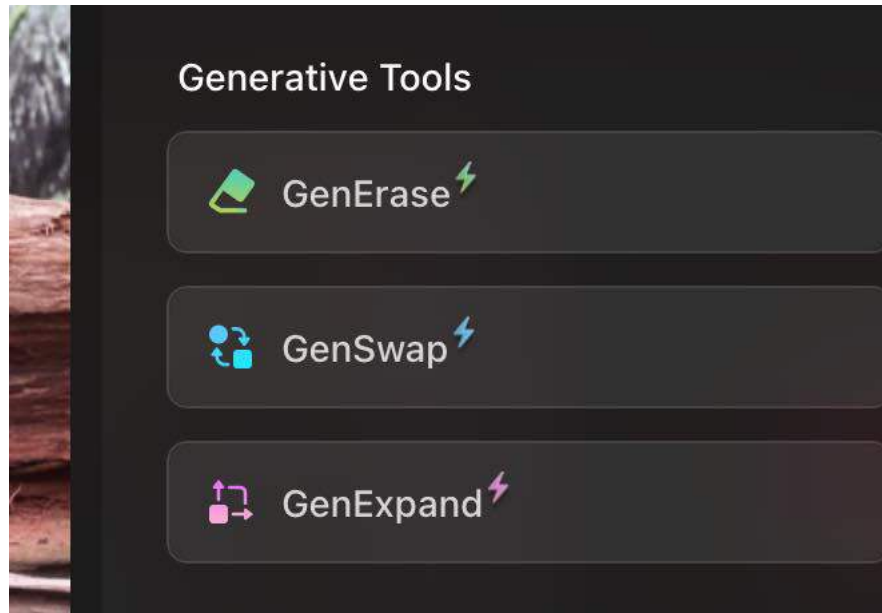


Figure 1- Screen capture of the Luminar Neo's Generative Tool menu

## The Metadata Challenge

Skylum is not a member of the Coalition for Content Provenance and Authenticity (C2PA) framework, which creates several verification challenges:

- No automatic documentation of AI modifications included in image metadata
- Verification of which editing tools were used becomes difficult
- Photographers bear the full responsibility for tracking their own editing processes

The application does not embed metadata or visual watermarks in exported images to indicate when any of the three generative features were used. However, digital forensic analysis techniques can detect evidence that generative AI tools were applied to the image.

## Best Practices for Competition Photography

### Before Editing:

- **Preserve your original files** and work on copies when editing. For JPEG files, always duplicate the original before making any edits to maintain an untouched backup. For RAW files, this isn't necessary since RAW editors work non-destructively. Your edits are stored as instructions separate from the original file,

and changes are only applied when you export the final image. The original RAW file always remains unmodified.

- Understand which processing mode you're using (Local vs. Stability AI)
- Review the specific competition's AI usage policies
- Plan your editing workflow to stay within acceptable boundaries

### During Editing:

- Utilize local processing modes when possible
- Avoid any tools that generate new image content
- Keep detailed records of your editing process
- When in doubt, use traditional (non-AI) editing methods

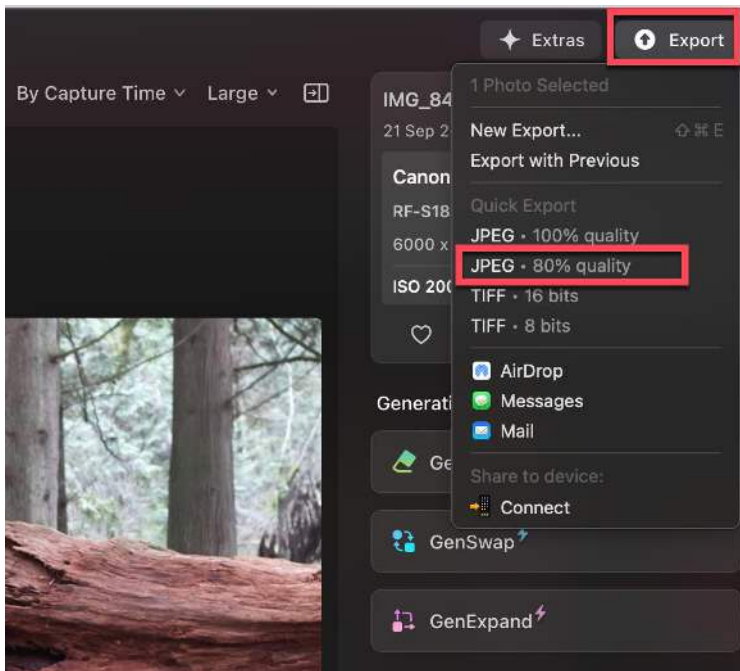
### Export Image with Metadata

**Step #1:** Complete your image editing process

**Step #2:** Select the **Export** button which is highlighted in the screen capture below.

**Step #3:** Select **JPEG - 80% quality**

**Step #4:** Select the **Export** button again and the image will be saved to your computer



*Figure 2 – Screen capture of the Luminar Neo's Export window.*

### File Submission Requirements for Competition Winners

CAPA may request the following image files from the potential winners:

- Original unedited JPEG or RAW file
- All source images used in composites or blends
- Working file (PSD or DNG) showing your editing process
- XMP metadata file (when applicable)

**Special Note** - Keep these files accessible throughout the competition period.

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**Verification & Authentication Processes:** All potential winning images files will be subjected to our analysis to ensure the authenticity of the submitted image and verify compliance with competition guidelines.

**Important:** Photographers that cannot provide the required verification files or fail our authenticity analysis then the image will be disqualified and competition results will be adjusted accordingly.

## Closing Comments

If you have any questions or concerns relating to the above details, you can email me at [competitions@capacanada.ca](mailto:competitions@capacanada.ca)

Sheldon Boles – FCAPA  
CAPA Director of Competitions