fotochipi

Image Enhancement and AI Upscaling App

Fotochipi is an interactive image processing application I developed, focused on enhancing images through both classic editing tools and AI-based upscaling. The app's intuitive interface allows users to upload images, apply transformations in real-time, and save their results ,all designed to showcase the process from raw to refined.

Features:

1- Gray Edition: Grayscale image enhancements, including quantization, windowing, gamma adjustments, and inversion.

2- Color Edition: Color-specific adjustments, featuring histogram equalization, histogram stretching, and channel inversion.

3- Noise Reduction: Filters to reduce image noise (mean, Gaussian, median) with live parameter sliders for fine-tuning.

4- Edge Detection: Canny edge detection with adjustable sensitivity settings.

5- ESRGAN AI Upscaling: AI-driven resolution enhancement using a Generative Adversarial Network (GAN) for 4x upscaling, powered by Xintao's ESRGAN model.

Reflection:

This project deepened my experience in image processing and applying AI to practical applications. It was a valuable exercise in blending classic image editing techniques with modern AI capabilities to achieve polished results.

Video Description

Source Code