

DOCUMENTATION OF PREPROCESSING DATA

I. Data structure:

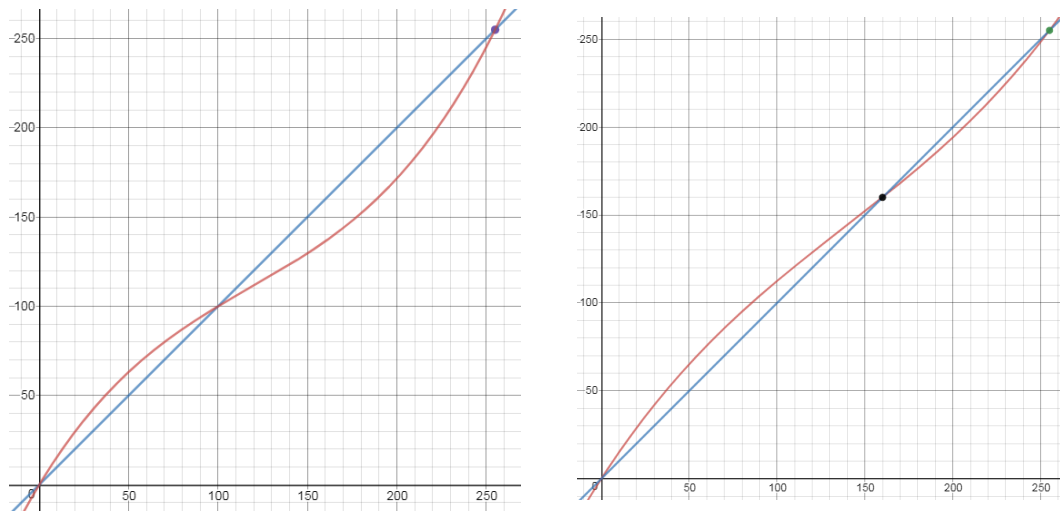
- **Original**: Storage of original images
- **Generated_Image**:
 - **001**: Reduced glare directory (section II – first method)
 - **003**: Reduced glare & enhanced contrast directory
- **helper.py**: necessary functions
- **generate.py**: Do generate!
- **show_case.py**: Run after generating to see deeper

II. Pre-processing data:

- **First processing method**: Reduce glare (RG) for all images in Original, output images are stored at Generated_Image/001

Include a 4-mixed-filter by 4 steps:

1. First polynomial function (see more at **section II – part 2** in [\[v20190404\] Reduce Glare - Giảm lóa.pdf](#))
2. Gamma correction: $g = 0.75$
3. Second polynomial function
4. Gamma correction: $g = 0.8$



*Left is **first polynomial function** with threshold = 100.
Right is **second polynomial function** with threshold = 160.*

- **Third processing method**: Reduce glare + Enhance contrast (RG + EC) for all images in Original, output images are stored at Generated_Image/003

Mixed 4 steps:

1. Reduce glare
2. Enhance contrast: factor = 1.6
3. Reduce glare
4. Enhance contrast: factor = 1.4