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SAARLAND UNIVERSITY
COMPUTER SCIENCE

High-Level Computer Vision Summer Semester 2022 – Project Proposal Feedback

General Comments
Vintage Colorization as a joint task of noise removal and image colorization is an interesting topic.
You should find a lot of literature for image colorization as it is a broad discussed topic, as your referenced survey already suggests. Your joined approach seems sensible as both areas estimate likely information on a prior. From your proposal I understand your main focus in the joint noise removal and colorization but feel free to set a different focus like varying noise challenges or high variance in image colorization.

Depending on your previous knowledge be careful with utilizing a pre-learned discriminator. If you have a too strong Discriminator in a vanilla GAN architecture at the beginning your Generator won't be able to learn very well.

About the data
If the stated facts about the dataset hold true it is well suited for the task. In your preprocessing focus on a few artifacts first and expand later if possible.

About the evaluation
There is nothing to add. I am interested in how strongly the bias introduced by the dataset is reflected in your generated images.

About the GPU usage
Training a GAN comes with high GPU usage. As this task should also be solvable with lower-level architectures try to think about switching to less demanding architectures if you run into time troubles and skip your improvement step.