

Progress Report

This report summarises the development of the project during the 5th Week (18/07/22-24/07/22)

Tasks	Date	Remarks
<ol style="list-style-type: none">1. Read research paper on learning deformable kernels.2. Read research paper on burst denoising and kernel prediction networks.3. Research paper on Blind Deconvolution Using a Normalized Sparsity Measure.	19/07/22 - 22/07/2022	Need some guidance on multiple image deblurring techniques.
<ol style="list-style-type: none">1. Implemented the FSIM (Feature Similality Image Metric) in Jax.	23/07/2022	There are some errors, possibly in the code to be fixed.
<ol style="list-style-type: none">1. Implement LPIPSvgg metric.	24/07/22	Code to be written and tested.
<ol style="list-style-type: none">1. Trained the algorithm on daisy flower images.	24/07/22	Algorithm trained successfully.
<ol style="list-style-type: none">1. Trained the algorithm on blurry images of the grass.	22/07/22 - 23/07/22	Algorithm trained successfully.

Milestones

1. The algorithm performs as expected on the [GPU Nvidia RTX 3060](#).
2. Training period of the algorithm is reduced considerably.
3. Trained the algorithm on [LLFF](#) synthetic dataset is partially successful with some errors.
4. Implementation of image quality assessment metrics is done. Require integration with the main code.
5. Implemented a no_encoding option in the NeRF with the existing positional encoding option.

