CENG 796 - Peer-review form

Reviewed project ID: Group 5

Reviewed project's title (title of the paper): FurryGAN: High Quality Foreground-aware Image Synthesis

Reviewer name(s): Erce Güder, Adnan Harun Doğan

Instructions:

- Answer = *Yes*, *No* or *Partial*.
- You may expand sections as necessary.
- For most questions, you do not need to add comments, unless the instructions tell you otherwise.
- "Notebook" refers to "Jupyter Notebook" file that is expected to be named as main.ipynb

Question	**Answer**	**Comments**
Contains a jupyter notebook file	Yes	
Notebook is located at <project_root>/main.ipynb	Yes	
Notebook's first section contains paper information (paper title, paper authors, and project group members' name & contact information) Some good examples: see group03, group10, group11 (and a couple of other groups).	Yes	
Notebook contains a section for hyper-parameters of the model.	Yes	
Notebook contains a section for training & saving the model.	Yes	
Notebook contains a section (or a few sections) for loading a pre-trained model & computing qualitative samples/outputs.	Yes	
Notebook contains reproduced plots and/or tables, as declared.	Yes	
Notebook contains pre-computed outputs.	Yes	
Data is included and/or a proper download script is provided.	Yes	

Notebook contains a section describing the difficulties encountered.	Yes	*They had struggles regarding the ambiguity of terms, especially hyper-parameters. These struggles are well-explained.*
The paper has achieved its goals and/or explained what is missing.	Partial	*The qualitative results on foreground/background images, and their composition is problematic.* *As far as I've understood from goals.txt, they've experienced mode-collapse.*
The notebook contains a section that reproduces the figure(s) and table(s) declared in the goals.	Yes	
The notebook also reports the original values of the targeted quantitative results, for comparison.	Yes	
MIT License is included.	Yes	
As the reviewer(s), you have read the paper & understood it.	Yes	*Method seems good. Authors included a bunch of loss functions to make it work though.*
Implementation of the model seems correct.	Partial	*Stop-gradient operator in Eq. 5 seems missing in code: it's not in losses.py, nor models.py.* *All the other equations seem to be correctly implemented.*
Notebook looks professional (in terms of notation, readability, etc.)	Yes	
Source code looks professional (in terms of coding style, comments, etc.)	Yes	*Fully commented, variable names clearly indicate the purpose.*

Additional comments:

It's hard to have suggestions to the repository since it's very well-prepared.
The code is modular, readable, and aesthetic, whereas the explanations are carefully put on.

I believe that there might be minor bugs in implementation, such as the one I've detected, that causes the model not to work.