Common Issues in Previous FLARE Paper Submissions

Please avoid these issues in your paper.
If the paper still has these issues, it will be directly rejected!

Submission website:
https://openreview.net/group?id=MICCAI.org/2023/FLARE

Please create your own figure and do not copy the template figure!

These parameters should match your method.

32x80x192x160

2,2,2

64x80x96x80

128x40x48x40

2,2,2

256x20x24x20

2,2,2

320x10x12x10

2,2,2

320x10x6x5

1,2,2

Font: Times New Roman

|	Input
	Output (1x1x1 conv followedby softmax)
	Conv - IN - LReLU (kernel size 1x3x3)
	Conv - IN - LReLU (kernel size 3x3x3)
	Convolution Transposed
----	Skip Connction
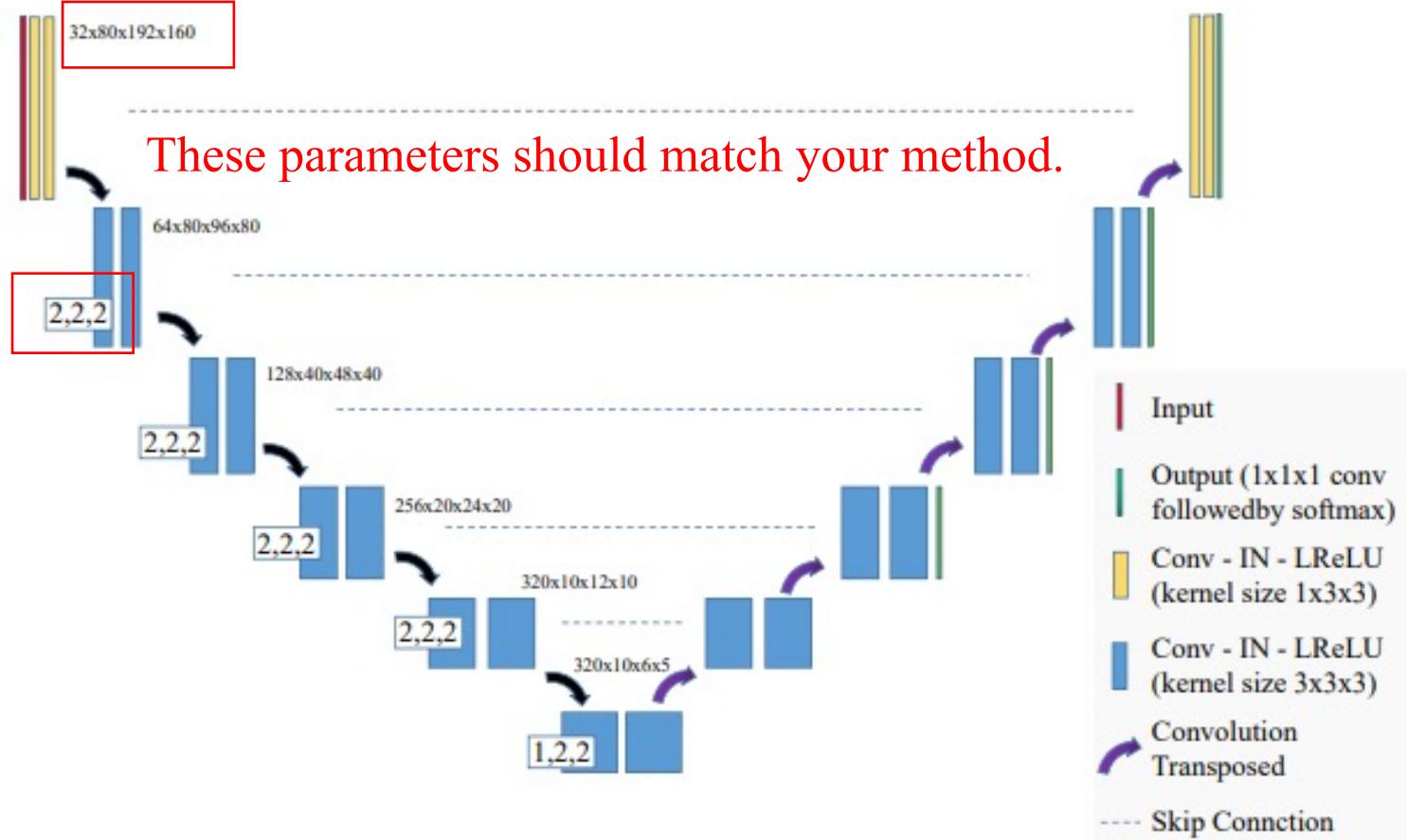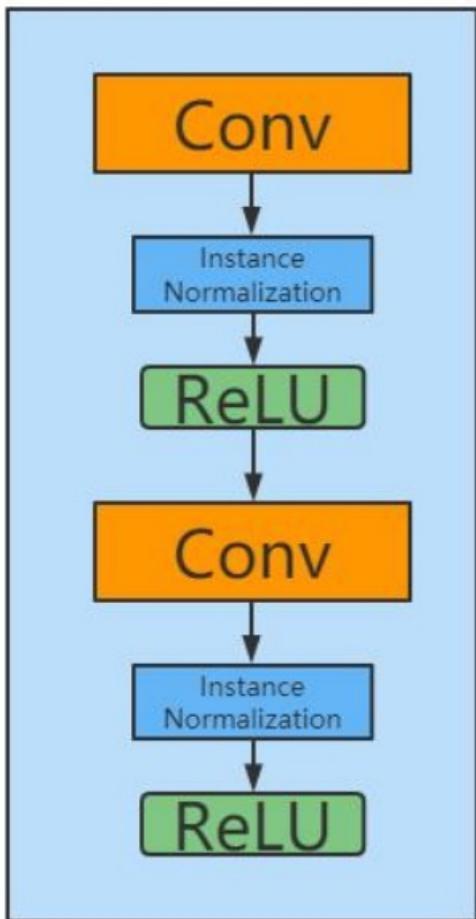
Fig. 1: 3D u-net as implemented in the nnU-Net framework.
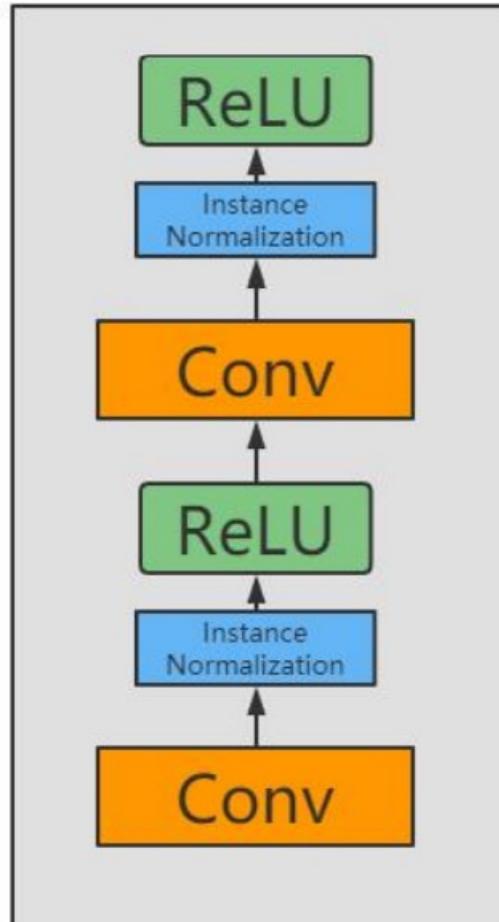
Should be U-Net   Please add explanation of your network☺

2

Please create high-resolution figures

Resolution is low
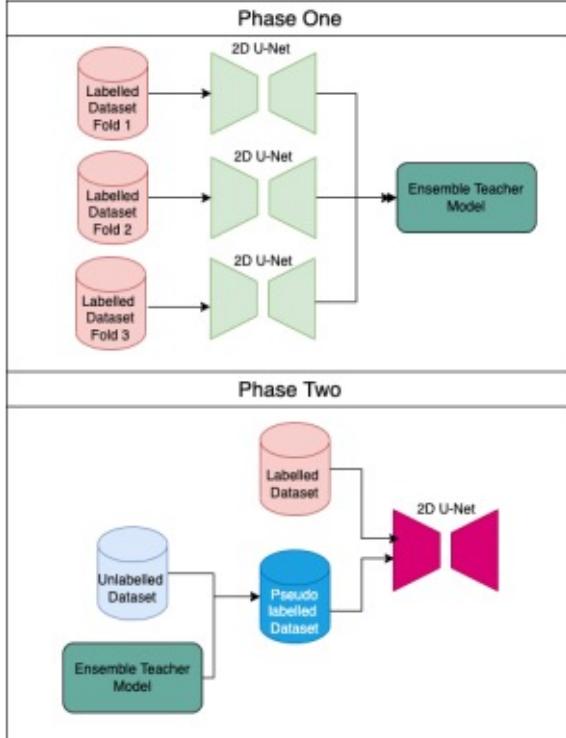
a) Encoding block

b) Decoding block

Please add explanation of your network block☺

Figure is too small

2 Method

Fig. 1. Two-Phase Approach

There is still room to zoom in the image.

Please add explanation of your network block☺

Common Table Issues

Table 1: Development environments and requirements.

Ubuntu version	20.04
CPU	Intel(R) Xeon(R) Gold 6152 CPU @ 2.10GHz (9 cores)
RAM	30GB
GPU (number and type)	1 NVIDIA GPU with at least 11G VRAM
CUDA version	11.3 with cudnn 8
Programming language	Python 3.9
Deep learning framework	PyTorch (Torch 1.11, torchvision 0.12, apex 0.1)
Specific dependencies	nnunet

Please specify the GPU name, e.g., 1 NVDIA 2080Ti (11G)

Common Table Issues

Table 2: Training protocol

Network initialization	"he" normal initialization
Batch size	2
Patch size	$40 \times 224 \times 192$
Total epochs	1000
Optimizer	SGD with nesterov momentum ($\mu = 0.99$)
Initial learning rate (lr)	0.01
Lr decay schedule	Exponentially decaying (poly lr)
Training time	40 hours per fold, per iteration

Please present total training time

Common Table Issues

Table 5: Ablation study for inference step size and test-time augmentation.

Step size	TTA	DSC	GPU time (s)
0.9	no	0.8848	56
0.9	yes	0.8860	102
0.5	no	0.0.8663	129
0.5	yes	0.8874	284

Horizontal line is missed.

Network initialization	Kaiming Uniform [6]
Batch size*	4
Gradient Accumulation Batches	64
Patch size	$128 \times 128 \times 64$
Total epochs	100
Optimizer	Adam [11] with betas=(0.9, 0.999)
Initial learning rate (LR)	0.01
Lr decay schedule	ReduceLROnPlateu with the patience of 3 epochs
Training time	6.678 hours
Number of model parameters	637,425
Number of flops	7.156G

Table 3: Hyperparamenters for Abdomen Region Segmentor

Table Title should be on top.
Figure Title should be on bottom.

Common Table Issues
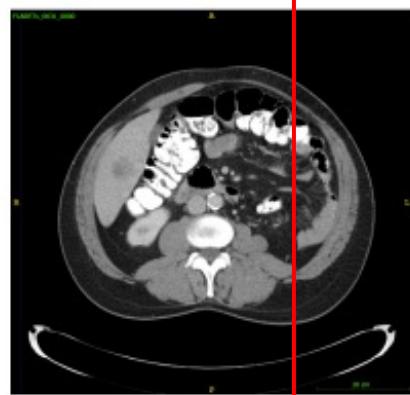
Table 3. Ablation of semi-supervised learning (SSL). LV, RK, SL, PC, AT, IVC, RAG, LAG, GB, EH, SM, DD, and LK are short for Liver, Right Kidney, Spleen, Pancreas, Aorta, Inferior Vena Cava, Right Adrenal Gland, Left Adrenal Gland, Gallbladder, Esophagus, Stomach, and Left kidney, respectively.

Method	Mean	LV	RK	SL	PC	AT	IVC	RAG	LAG	GB	EH	SM	DD	LK
nnU-Net w/o SSL	0.869	0.967	0.880	0.941	0.841	0.949	0.882	0.822	0.819	0.821	0.877	0.885	0.748	0.871
nnU-Net w SSL	**0.895**	0.978	0.897	0.973	0.909	0.973	0.922	0.839	0.826	0.779	0.900	0.914	0.838	0.888
Light UNet w/o SSL	0.837	0.965	0.869	0.932	0.830	0.945	0.860	0.766	0.731	0.731	0.837	0.858	0.717	0.843
Light UNet w SSL	**0.878**	0.976	0.910	0.969	0.894	0.960	0.896	0.807	0.763	0.764	0.865	0.915	0.799	0.891

Please do not exceed the default layout. You can present the results in multiple rows or vertically display it.

Common Figure Issues
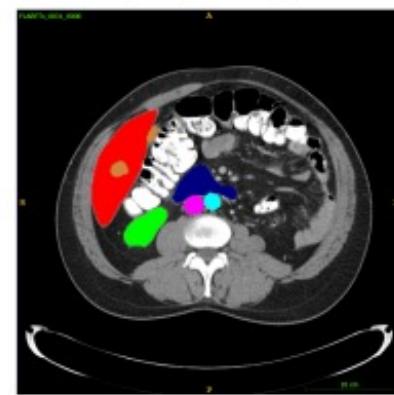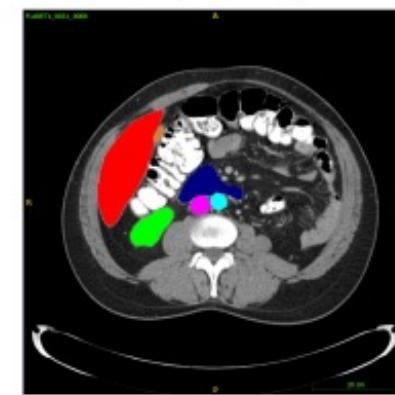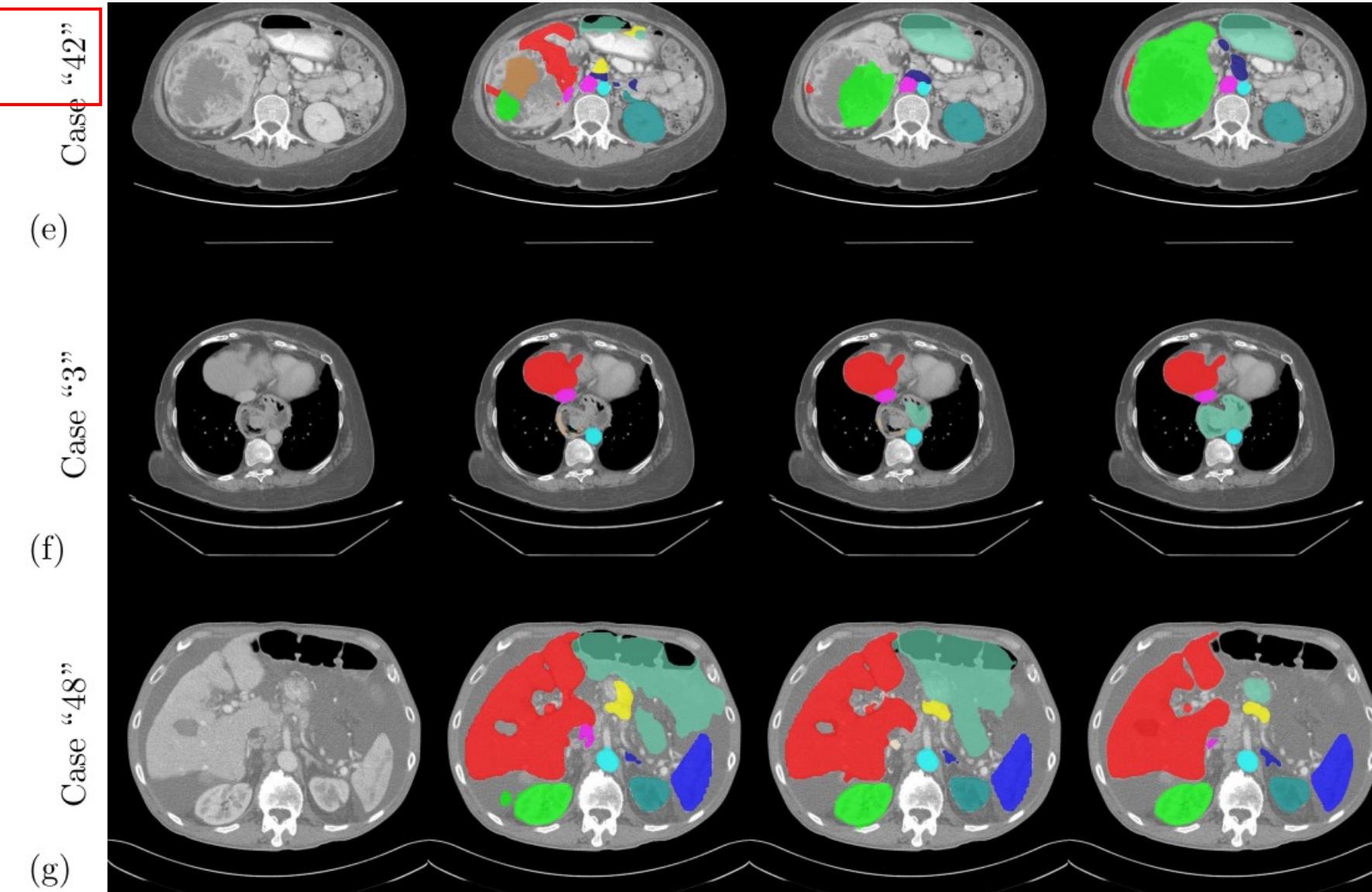
Fig. 3: Effect of post-processing. After iteration 4 the model wrongly segments the liver lesion as gallbladder. This is corrected with the post-processing step.
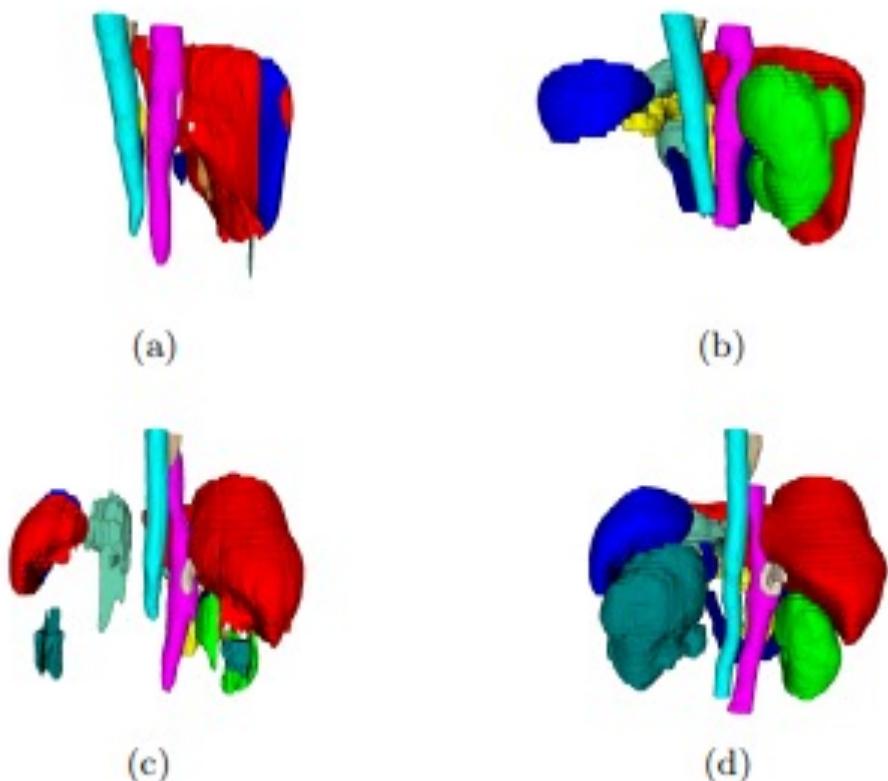
Font: Times New Roman

Please do not exceed the default layout.

Case "42"

(e)

Case "3"

(f)

Case "48"

(g)

Common Figure Issues

(a) (b)

(c) (d)

Please show examples in axial slices as well, not just show 3D results.
If the space is not enough, please only keep the segmentation results of axial slices (similar to the example in page 15).

Fig. 4. Some bad predicted results on the validation set and their corresponding labels. In the figure, a and c are the predicted result, and b and d are the original labels corresponding to a and c respectively.

Common Figure Issues
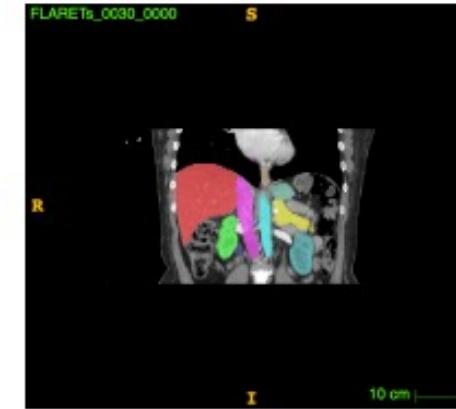
The organs are too small while the black background is large. Please zoom in the organs.
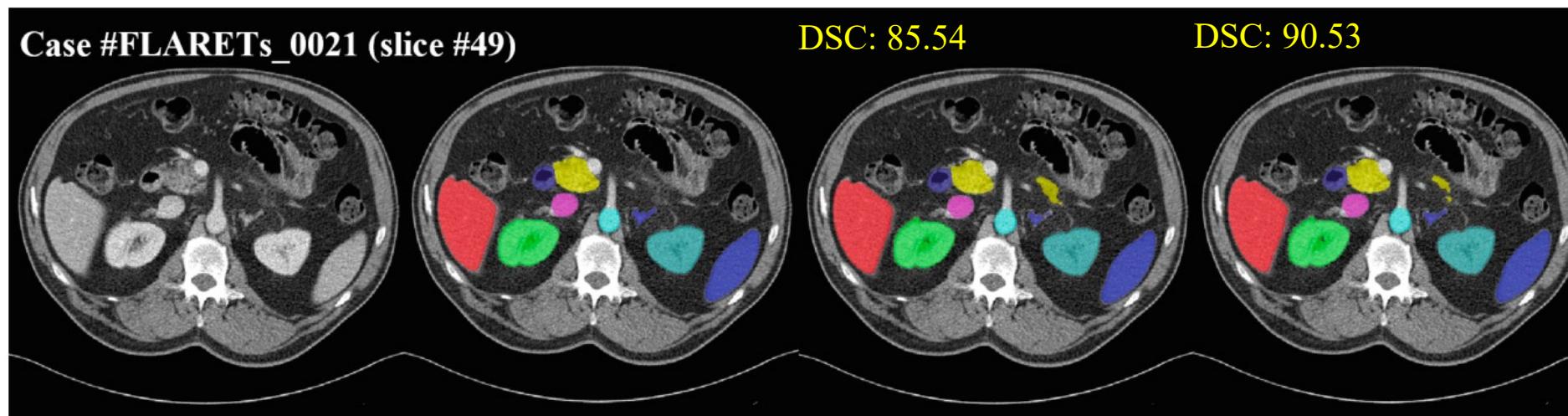

(a) Coronal Plane-GT   (b) Sagittal Plane-GT   (c) Transverse Plane-GT
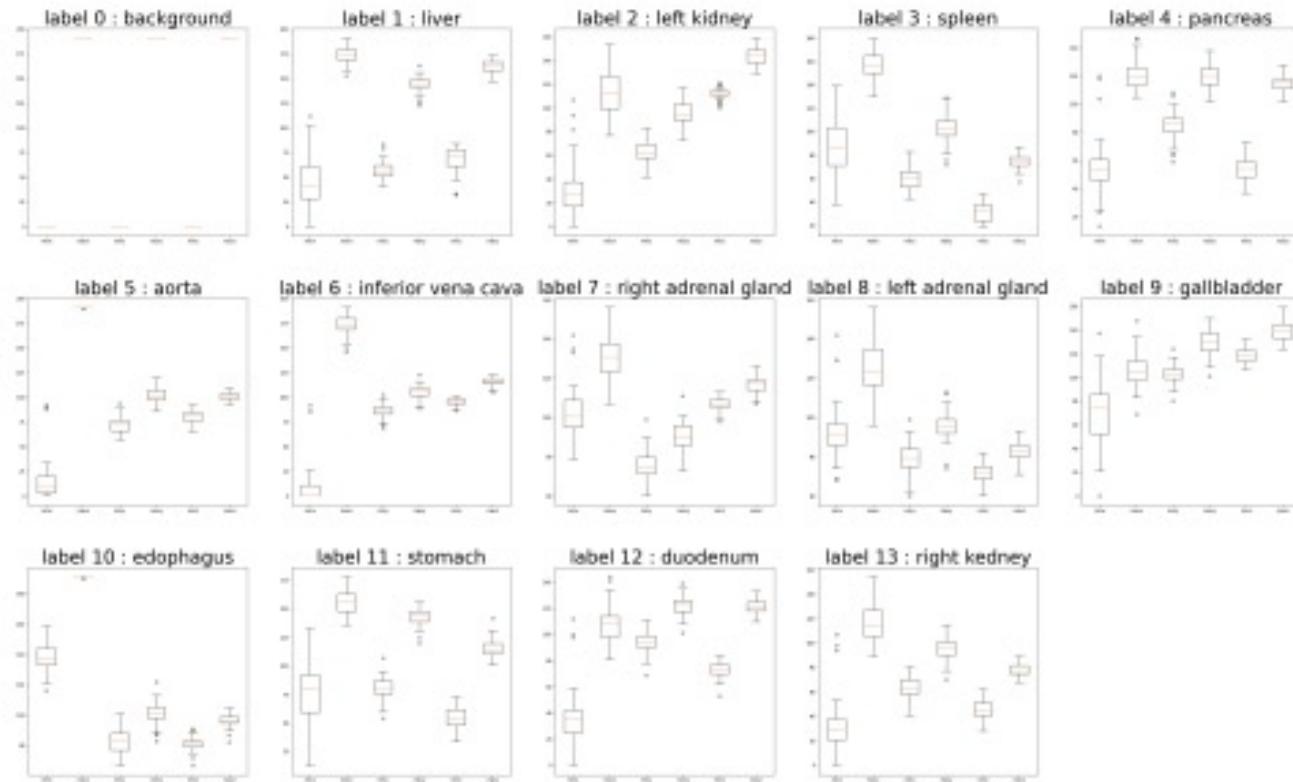
Here is a geate example to show the segmentation result. Please mark the case name and slice number

Common Figure Issues

x-axis label and y-axis label are missed. Sub-figures are too small. Please zoom in them. If you do not have enough space, please put them in the supplementary.


Fig. 2. Labels location statistics

Reference format should be consistent.

Two examples for journal and conference papers

```
122  @article{TCIA,
123    title={The Cancer Imaging Archive (TCIA): maintaining and operating a public
       information repository},
124    author={Clark, Ken and Vendt, Bruce and Smith, Kirk and Freymann, John and
       Kirby, Justin and Koppel, Paul and Moore, Stephen and Phillips, Stephen and
       Maffitt, Derek and Pringle, Michael and Tarbox, Lawrence and Prior, Fred},
125    journal={Journal of Digital Imaging},
126    volume={26},
127    number={6},
128    pages={1045--1057},
129    year={2013}
130  }
131
132  @inproceedings{ITKSNAP,
133    title={ITK-SNAP: An interactive tool for semi-automatic segmentation of multi-
       modality biomedical images},
134    author={Yushkevich, Paul A and Gao, Yang and Gerig, Guido},
135    booktitle={Annual International Conference of the IEEE Engineering in Medicine
       and Biology Society},
136    pages={3342--3345},
137    year={2016}
138  }
139
140
```

Key words should be capital.
Wrong example: Journal of digital imaging;

Key words should be capital.
Don't add 34th and conference abbreviation

Journal paper should include title, author, journal name, volume, number, pages, and year.
Proceeding should include title, author, booktitle, pages, and year. (Optional: publisher)

"Month" is not needed.
Please present the full name for conference. Don't use abbreviation e.g., CVPR, MICCAI

Other Notes

➢ Please use the official template. We only accept latex format for publication.
  https://www.overleaf.com/read/cfnjxkkqyfrr
➢ Include detailed Affiliations, Email-Addresses, and ORCID in the first page
➢ Mark the corresponding author.
➢ The font should be Times New Roman in figures.
➢ Please describe all the data augmentations you used
➢ Please describe your strategies to improve the segmentation efficiency (GPU consumption and running time) in Sec 2. If you do not have any design, please explicitly describe that. E.g., we do not optimize the segmentation efficiency.
➢ Ablation study results should be presented in Sec 4.1 and 4.2.
➢ Checklist Table MUST be included in the manuscript

Minors:
➢ "figure"-> Fig. (The same as the Figure identifier)
➢ "table"-> Table
➢ "u-net"->U-Net

Checklist Table MUST be included in the manuscript

Table 6. Checklist Table. Please fill out this checklist table in the answer column.

Requirements	Answer
A meaningful title	Yes/No
The number of authors (≤ 6)	Number
Author affiliations, Email, and ORCID	Yes/No
Corresponding author is marked	Yes/No
Validation scores are presented in the abstract	Yes/No
Introduction includes at least three parts: background, related work, and motivation	Yes/No
A pipeline/network figure is provided	Figure number
Pre-processing	Page number
Strategies to use the partial label	Page number
Strategies to use the unlabeled images.	Page number
Strategies to improve model inference	Page number
Post-processing	Page number
Dataset and evaluation metric section is presented	Page number
Environment setting table is provided	Table number
Training protocol table is provided	Table number
Ablation study	Page number
Efficiency evaluation results are provided	Table number
Visualized segmentation example is provided	Figure number
Limitation and future work are presented	Yes/No
Reference format is consistent.	Yes/No

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When Author is more than one person the expression "Author" as used in this Agreement will apply collectively unless otherwise indicated.

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Thanks for your great contributions to MICCAI FLARE!

Looking forward to your submissions.

https://openreview.net/group?id=MICCAI.org/2023/FLARE

Paper submission should include

➢ **Your paper (pdf, ≥ 8 pages)**

➢ **Supplementary (zip, include copyright file and latex file)**

* PDF
Upload a PDF file that ends with .pdf   **Paper PDF**

Choose file   No file chosen   ✕

Supplementary Material   **Zip of copyright and latex file**
Supplementary material (e.g. code or video). All supplementary material must be self-contained and zipped into a single file.

Choose file   No file chosen   ✕

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