A Multi-stage Cascaded Encoder-decoder Framework for CT-to-PET Image Conversion in Lung Imaging

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Abstract:

The abstract using Times New Roman font with point size 9. The abstract is an essential part of the paper. Use short, direct, and complete sentences. It shoulds be as brief as possible and concise. It should be complete, self-explanatory, and not require reference to the paper itself. The abstract should be informative giving the scope and emphasize the main conclusions, results, or significance of the work described. Do not use the first person; do not include mathematical expressions; do not refer to the reference, and try to avoid acronyms. Keywords:

Tracking; Estimation; Information fusion; Resource management; Using point size 9

1. Introduction

These are instructions for authors typesetting for *the International Conference on Machine Learning and Cybernetics (ICMLC) and the International Conference on Wavelet Analysis and Pattern Recognition (ICWAPR).* This document has been prepared using the required format. The electronic copy of this document can be found in: http://www.icmlc.com/.

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Use 1.5 centimeters (0.6 inches) for the left and right margins. Use Times New Roman and font size 10 for text (character size). Do not use bold font in the main text; if you want to emphasize specific parts of the main text, use italics. Start a new paragraph by indenting it from the left margin (and not by inserting a blank line), except under a section or subsection heading. The text should be prepared with a double column format and single line spacing.

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All tables must be numbered consecutively (in Arabic numbers). Table headings should be placed (centered) above the table. Place tables as close as possible to where they are mentioned in the main text.

TABLE 1. Encoder-decoder Setting Table

Block Name	input	output	trans	dropout
Encoder 1	3	16	-	-
Encoder 2	16	24	-	-
Encoder 3	24	42	-	-
Encoder 4	42	81	-	-
Encoder 5	81	114	-	-
Encoder 6	114	162	-	-
Encoder 7	162	162	-	-
Encoder 8	162	960	-	-
Decoder 1	960	960	162	0.5
Decoder 2	1122	162	162	0.5
Decoder 3	324	114	114	0.5
Decoder 4	228	81	81	-
Decoder 5	162	42	42	-
Decoder 6	84	24	24	-
Decoder 7	48	16	16	-
Visual Block	32	3	-	-

TABLE 2. Parameters of Neural Networks.

Architectures	Parameters
U-Net[**?**]	54.41
Cas-UNet[**?**]	108.82
DualStageGGAN[**?**]	92.54
Stage01	22.13
Stage02	44.26
Stage03	66.39
Stage04	88.52
Stage05	110.65
Stage06	132.77
Stage07	154.90
Stage08	177.03
Stage09	199.16
Stage10	221.29

The table depicts the Parameters of different generators. The quantity of parameters is expressed in millions.

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Mathematical formulas should be roughly centered and have to be numbered as formula (1).

$$y = f(x) \tag{1}$$

2.9. References

References to the literature should be mentioned in the main text by an Arabic number in square brackets [1], [2]. List these (in cited order) at the very end of your paper (under the heading References). Start each reference on a new line with its number in square brackets [3].
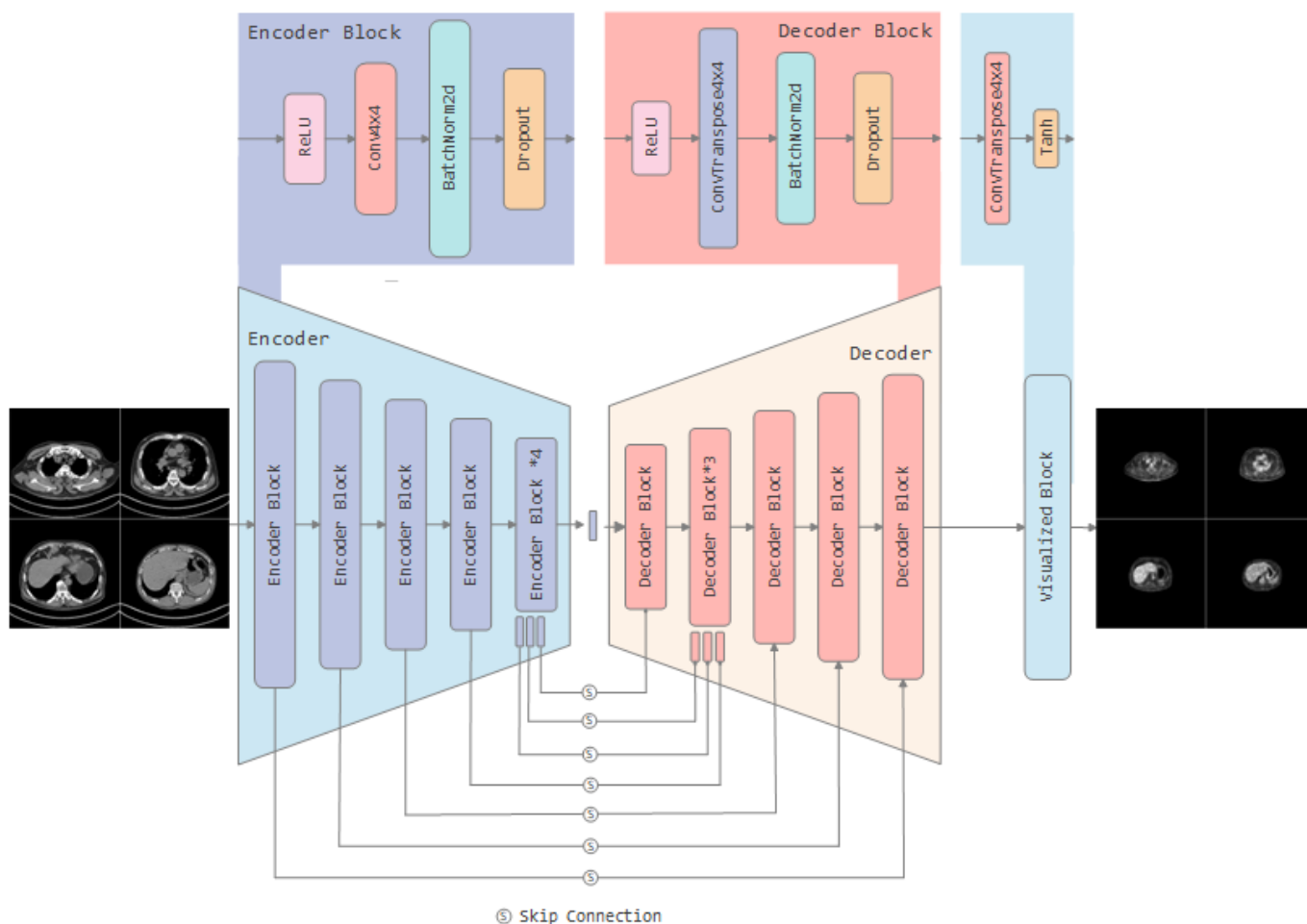
FIGURE 1. Schematic Diagram of Data Flow Within the Model. The PET image is shown on the left, and the CT image on the right. The blue modules correspond to the encoder architecture, while the orange modules represent the decoder architecture. The upper portion of the figure illustrates the fundamental structures of the encoder blocks, decoder blocks, and visualization blocks. The connections in the lower portion indicate the skip connections.

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3. Conclusions

In this sample paper, we have presented the formatting instructions for ICMLC and ICWAPR.

Acknowledgements

References

[1] Peter. C. Author, "Paper's name", Proceeding of ICMLC2002 Conference, Beijing, pp. 111-116, November 2002.

[2] John. B. Author, and A. Friend, "Journal paper's name", Journal's name, Vol 39, No. 1, pp. 222-226, Feb. 2001.

[3] Xizhao Wang, His book's name, Publisher, Location, Year.