BiX-NAS: Searching Efficient Bi-directional Architecture for Medical Image Segmentation

Xinyi Wang $^{1,*},$ Tiange Xiang $^{1,*},$ Chaoyi Zhang 1, Yang Song 2, Dongnan Liu 1, Heng Huang $^{3,4},$ and Weidong Cai 1

 School of Computer Science, University of Sydney, Australia
 School of Computer Science and Engineering, University of New South Wales, Australia

³ Electrical and Computer Engineering, University of Pittsburgh, USA
⁴ JD Finance America Corporation, Mountain View, CA, USA
{xwan2191, txia7609, dliu5812}@uni.sydney.edu.au
{chaoyi.zhang, tom.cai}@sydney.edu.au
yang.song1@unsw.edu.au
henghuanghh@gmail.com

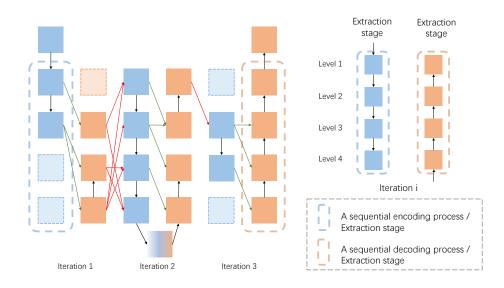
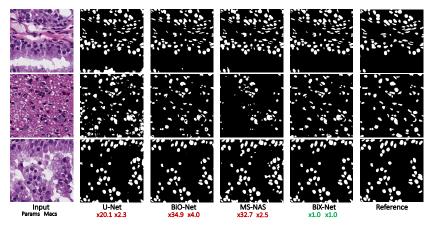
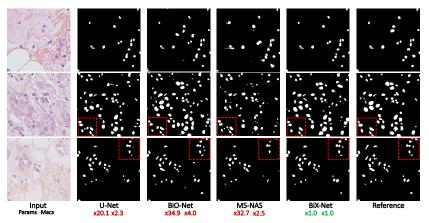


Fig. 1. Our searched BiX-Net with $\mathbf{L}=4$ levels and $\mathbf{T}=3$ iterations.

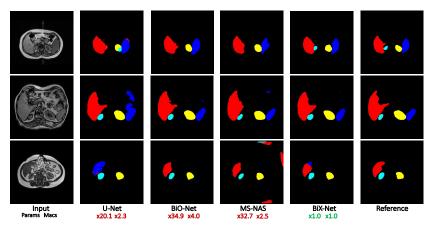
^{*} Equal contributions.



 ${\bf Fig.~2.~Qualitative~comparison~on~MoNuSeg.}$



 ${\bf Fig.\,3.}\ {\bf Qualitative\ comparison\ on\ TNBC}.$



 ${\bf Fig.\,4.}\ {\bf Qualitative\ comparison\ on\ Multi-class\ organ\ segmentation.}$