Xiaoqing GUO

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EDUCATION

City University of Hong Kong (CityU), Hong Kong   Sep. 2018 - Present
Ph.D. in Electrical Engineering (EE), GPA: 3.925/4
Supervisor: Prof. Yixuan Yuan

Beihang University (BUAA), Beijing, China   Sep. 2014 - Jun. 2018
B.E. in Biomedical Engineering (BME), GPA: 3.64/4
Supervisor: Prof. Yu Wang (**Honor: Outstanding Undergraduate Thesis Award**)

PREVIOUS WORK EXPERIENCE

Tsinghua University, Beijing, China   Sep. 2017 - Jul. 2018
Research Assistant in Department of Electrical Engineering (EE)
Supervisor: Prof. Yongfeng Huang

RESEARCH INTERESTS

Medical Image Analysis, Deep Learning.

My research interests include abnormality recognition and segmentation. Recently, I am dedicated to making adequate use of unannotated data, augmenting the limited training data and enabling robust training of deep neural network.

PUBLICATIONS (GOOGLE SCHOLAR)

1. Jie Liu, **Xiaoqing Guo**, Baopu Li, Yixuan Yuan. "JDS: Joint Domain and Semantic Prediction for Domain Adaptation of Semantic Segmentation." *IEEE International Conference on Intelligent Robots and Systems (**IROS 2021**)*, Prague, Czech Republic.

2. **Xiaoqing Guo**, Chen Yang, Yixuan Yuan. "Dynamic-Weighting Hierarchical Segmentation Network for Medical Images." *Medical Image Analysis (**MedIA**)*. (**Impact Factor: 11.148**)

3. Jie Liu, **Xiaoqing Guo**, Yixuan Yuan. "Prototypical Interaction Graph for Unsupervised Domain Adaptation in Surgical Instrument Segmentation." *The 24nd International Conference on Medical Image Computing and Computer Assisted Intervention (**MICCAI 2021**)*, Strasbourg, France.

4. Chen Yang, **Xiaoqing Guo**, Meilu Zhu, Bulat Ibragimov, Yixuan Yuan. "Progressive Mutual-Prototype Alignment with Disentangled Reconstruction for Polyp Segmentation." *IEEE Journal of Biomedical and Health Informatics (**JBHI**)*. (**Impact Factor: 5.772**)

5. Wuyang Li, Chen Yang, Jie Liu, Xinyu Liu, **Xiaoqing Guo**, Yixuan Yuan. "Comprehensive Polyp Detection and Segmentation with Heterogeneous Endoscopic Data." *The 3rd International Endoscopy Computer Vision Challenge and Workshop (EndoCV) of ISBI 2021, Nice, France.* (Ranked **1st** place in polyp detection)

6. Xinyu Liu, **Xiaoqing Guo**, Yajie Liu, Yixuan Yuan. "Consolidated domain adaptive detection and localization framework for cross-device colonoscopic images." *Medical Image Analysis (MedIA)*, p. 102052, 2021. (**Impact Factor: 11.148**)

7. **Xiaoqing Guo***, Chen Yang*, Baopu Li, Yixuan Yuan. MetaCorrection: Domain-aware Meta Loss Correction for Unsupervised Domain Adaptation in Semantic Segmentation. *IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR 2021**)*.

8. Zhen Chen, **Xiaoqing Guo**, Peter Y. M. Woo, Yixuan Yuan. "Super-Resolution Enhanced Medical Image Diagnosis with Sample Affinity Interaction." *IEEE Transactions on Medical Imaging (**TMI**)*, 2021. (**Impact Factor: 10.048**)

9. **Xiaoqing Guo**, Chen Yang, Yajie Liu, Yixuan Yuan. "Learn to Threshold: ThresholdNet with Confidence-Guided Manifold Mixup for Polyp Segmentation." *IEEE Transactions on Medical Imaging (**TMI**)*, vol. 40, no. 4, pp. 1134-1146, 2020. (**Impact Factor: 10.048**)

10. **Xiaoqing Guo**, Yixuan Yuan. "Semi-supervised WCE Image Classification with Adaptive Aggregated Attention." *Medical Image Analysis (**MedIA**)*, p, 101733, 2020. (**Impact Factor: 11.148**)

11. Zhen Chen, **Xiaoqing Guo**, Chen Yang, Bulat Ibragimov, Yixuan Yuan. "Joint Spatial-Wavelet Dual-Stream Network for Super-Resolution." *The 23nd International Conference on Medical Image Computing and Computer Assisted Intervention (**MICCAI 2020**)*, Lima, Peru.

12. **Xiaoqing Guo**, Zhen Chen, Yixuan Yuan. "Complementary Network with Adaptive Receptive Fields for Melanoma Segmentation." *The 17th IEEE International Symposium on Biomedical Imaging (**ISBI 2020**)*, Iowa City, Iowa, USA.

13. **Xiaoqing Guo**, Chen Yang, Pak Lun Lam, Peter Y.M. Woo, Yixuan Yuan. "Domain Knowledge Based Brain Tumor Segmentation and Overall Survival Prediction." *Brain Lesion (BrainLes) workshop of MICCAI 2019*, Shenzhen, China.

14. **Xiaoqing Guo**, Yixuan Yuan. "Triple ANet: Adaptive Abnormal-aware Attention Network for WCE Image Classfication." *The 22nd International Conference on Medical Image Computing and Computer Assisted Intervention (**MICCAI 2019**)*, Shenzhen, China. (Early Accept)

15. Yixuan Yuan, Wenjian Qin, **Xiaoqing Guo**, Mark Buyyounouski, Steve Hancock, Bin Han, Lei Xing. "Prostate Segmentation with Encoder-Decoder Densely Connected Convolutional Network (ED-DenseNet)." *The 16th IEEE International Symposium on Biomedical Imaging (**ISBI 2019**)*, Venice, Italy.

16. Zhongliang Yang, **Xiaoqing Guo**, Ziming Chen, Yongfeng Huang, Yujin Zhang. "RNN-stega: Linguistic steganography based on recurrent neural networks." *IEEE Transactions on Information Forensics and Security (**TIFS**)*, 14(5): 1280-1295, 2019. (**Impact Factor: 6.211**)

17. Siyuan Shan, Wen Yan, **Xiaoqing Guo**, Eric I Chang, Yubo Fan, Yan Xu. "Unsupervised End-to-end Learning for Deformable Medical Image Registration." *arXiv*, https://arxiv.org/abs/1711.08608

SELECTED AWARDS

- **Outstanding Academic Performance Award (OAPA)**, City University of Hong Kong 2020

- **Research Tuition Scholarship (RTS)**, City University of Hong Kong   2020 - 2021

- **Outstanding Academic Performance Award (OAPA)**, City University of Hong Kong 2019

- **Research Tuition Scholarship (RTS)**, City University of Hong Kong   2019 - 2020
- **Honorable Mention**, Mathematical Contest in Modeling (MCM)   2016
- **Grand Prize**, the 25th "Feng Ru Cup" Competition of Innovation, BUAA   2015

PROFESSIONAL ACTIVITIES

Technical Reviewers

- MICCAI 2019, ISBI 2021, MICCAI 2021
- IEEE Transactions on Medical Imaging (TMI)
- Medical Physics

Conference Presentations

- MICCAI 2019, Shenzhen, China   Oct. 2019
- ISBI 2019, Venice, Italy   Apr. 2019