

Xiaoqing GUO

Room G2325, AC1, City University of Hong Kong, Kowloon, Hong Kong.

Email: xiaoqingguo1128@gmail.com ♦ Web: <https://Guo-Xiaoqing.github.io/>

EDUCATION

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

Sep. 2018 - Present

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

Sep. 2014 - Jun. 2018

PREVIOUS WORK EXPERIENCE

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

Sep. 2017 - Jul. 2018

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**, Yixuan Yuan. "Prototypical Interaction Graph for Unsupervised Domain Adaptation in Surgical Instrument Segmentation." *The 24th International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI 2021)*, Strasbourg, France.
2. 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: 5.223**)
3. 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)
4. 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**)
5. **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)*.

6. 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: 6.685**)
7. **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: 6.685**)
8. **Xiaoqing Guo**, Yixuan Yuan. “Semi-supervised WCE Image Classification with Adaptive Aggregated Attention.” *Medical Image Analysis (MedIA)*, p, 101733, 2020. (**Impact Factor: 11.148**)
9. Zhen Chen, **Xiaoqing Guo**, Chen Yang, Bulat Ibragimov, Yixuan Yuan. “Joint Spatial-Wavelet Dual-Stream Network for Super-Resolution.” *The 23rd International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI 2020)*, Lima, Peru.
10. **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.
11. **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.
12. **Xiaoqing Guo**, Yixuan Yuan. “Triple ANet: Adaptive Abnormal-aware Attention Network for WCE Image Classification.” *The 22nd International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI 2019)*, Shenzhen, China. (Early Accept)
13. 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.
14. 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**)
15. 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)

Conference Presentations

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