Xiaoqing GUO

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EDUCATION

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

Beihang University (BUAA), Beijing, China — Sep. 2014 - Jun. 2018
B.E. in Biomedical Engineering (BME)
GPA: 3.64/4, (**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, brain tumor diagnosis and survival prediction. Recently, I am dedicated to making adequate use of unannotated data.

PUBLICATIONS (GOOGLE SCHOLAR)

1. **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)
2. 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
3. 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**)
4. 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

PUBLICATIONS UNDER REVIEW

1. **Xiaoqing Guo**, Yixuan Yuan. "Semi-supervised WCE Image Classification with Adaptive Aggregated Attention." *IEEE Transactions on Medical Imaging (**TMI**).*

RESEARCH EXPERIENCES

Automatic Diagnosis for Wireless Capsule Endoscopy Images Sep. 2018 - Present

- Classification and localization for WCE images
- Abnormality detection based on attention mechanism
- Semi-supervised learning for WCE image analysis

Diagnosis of Brain Tumor in MRI Sep. 2018 - Present

- Automatic brain tumor segmentation
- Survival and grading prediction with incorporating clinical information

Melanoma Segmentation for Dermoscopy Images Jan. 2019 - Present

- Semi-supervised learning for automatic melanoma segmentation

Coverless Text Steganography Nov. 2017 - Jul. 2018

- Coverless information hiding based on recurrent neural networks
- Constructed a language model network to automatically generate a high-quality text according to a secret bit stream

Medical Image Registration Jan. 2017 - Jun. 2018

- 2D/3D (X-ray/CT) medical image registration using Convolutional Neural Network
- 2D (CT or MRI) medical image registration with unsupervised learning strategy

SELECTED AWARDS

- **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

Conference Presentations

- ISBI 2018, Venice, Italy Apr. 2019