YUEMING JIN

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EDUCATION

The Chinese University of Hong Kong (CUHK)   *Aug. 2015 - Jul. 2019*
Ph.D., Computer Science and Engineering
Advisor: Prof. Pheng-Ann Heng and Prof. Chi-Wing Fu

Northeastern University (NEU)   *Sep. 2012 - Jun. 2015*
B.E., Biomedical Engineering
GPA: 90.8/100 (3.9/4.0), Rank: 1/107

RESEARCH INTERESTS

My research interests include Medical Image Analysis, Surgical Robotic Perception, Deep Learning.

I am dedicated to interdisciplinary researches at medical image analysis and artificial intelligence. I have expertise in deep learning for dynamic surgical video computing.

PUBLICATIONS

1. Incorporating Temporal Prior from Motion Flow for Instrument Segmentation in Minimally Invasive Surgery Video
   Yueming Jin, Keyun Cheng, Qi Dou, Pheng-Ann Heng
   Medical Image Computing and Computer Assisted Intervention (**MICCAI**), 2019. **Oral (3%)**

2. Robust Multimodal Brain Tumor Segmentation via Feature Disentanglement and Gated Fusion
   Cheng Chen, Qi Dou, **Yueming Jin**, Hao Chen, Jing Qin, Pheng-Ann Heng
   Medical Image Computing and Computer Assisted Intervention (**MICCAI**), 2019.

3. Multi-Task Recurrent Convolutional Network with Correlation Loss for Surgical Video Analysis
   Yueming Jin, Huaxia Li, Qi Dou, Hao Chen, Jing Qin, Chi-Wing Fu, Pheng-Ann Heng
   Medical Image Analysis (**MedIA, IF: 8.88**), 2019.

4. Learning for Automated Contouring of Primary Tumor Volumes by MRI for Nasopharyngeal Carcinoma
   Li Lin*, Qi Dou*, **Yueming Jin**, Guanqun Zhou, Yiqiang Tang, Weilin Chen, Bao-An Su, Feng Liu, Changjuan Tao, Ning Jiang, Junyun Li, Linglong Tang, Chuanmiao Xie, Shaoming Huang, Pheng-Ann Heng, Jun Ma, Joseph Wee, Melvin Chua, Hao Chen, Ying Sun
   Radiology (IF: 7.47), 2019.

5. SV-RCNet:Workflow Recognition from Surgical Videos using Recurrent Convolutional Network
   Yueming Jin, Qi Dou, Hao Chen, Lequan Yu, Jing Qin, Chi-Wing Fu, Pheng-Ann Heng
   IEEE Transactions on Medical Imaging (**TMI, IF: 7.82**), 2018.

6. Automated Pulmonary Nodule Detection via 3D ConvNets with Online Sample Filtering and Hybrid-Loss Residual Learning.
   Qi Dou, Hao Chen, **Yueming Jin**, Huangjing Lin, Jing Qin, Pheng-Ann Heng
   Medical Image Computing and Computer Assisted Intervention (**MICCAI**), 2017.

7. 3D Deeply Supervised Network for Automated Segmentation of Volumetric Medical Images
   Qi Dou, Lequan Yu, Hao Chen, **Yueming Jin**, Xin Yang, Jing Qin, Pheng Ann Heng
   Medical Image Analysis (**MedIA, IF: 8.88**), 2017. **Best Paper Award**

8. Reconfigurable Interlocking Furniture
   Peng Song*, Chi-Wing Fu*, **Yueming Jin**, Hongfei Xu, Ligang Liu, Pheng-Ann Heng, Daniel Cohen-Or
   ACM Transactions on Graphics (**ACM TOG, IF: 4.22**), **SIGGRAPH Asia**, 2017.

9. 3D Deeply Supervised Network for Automatic Liver Segmentation from CT Volumes
   Qi Dou, Hao Chen, **Yueming Jin**, Lequan Yu, Jing Qin, Pheng-Ann Heng
   Medical Image Computing and Computer Assisted Intervention (**MICCAI**), 2016.

10. Non-Local Sparse and Low-Rank Regularization for Structure-Preserving Image Smoothing
    Lei Zhu, Chi-Wing Fu, **Yueming Jin**, Mingqiang Wei, Jing Qin, Pheng-Ann Heng
    Computer Graphics Forum (**Pacific Graphics**), 2016.

11. A Renal Vascular Compartment Segmentation Method based on Dynamic Contrast-Enhanced Images
    Hong Li, Nan Bao, Xieping Xu, Yaonan Zhang, Shikai Jin, **Yueming Jin**, Haoran Sun
    Technology and Health Care, 2016.

12. The Feasibility for Dicrotic Augmentation Index to Replace Tidal Augmentation Index.
    Yingfei Su, Yahui Zhang, **Yueming Jin**, Yang Yao, Ruifeng Zhang, Yongsheng Jiang, Lisheng Xu
    IEEE International Conference on Information and Automation (**ICIA**), 2014.

13. Estimation of Carotid Artery Pressure Waveform by Transfer Function and Radial Pressure Waveform
    Yang Yao, Liling Hao, Ning Geng, **Yueming Jin**, Shangjie Du, Lisheng Xu
    IEEE World Congress on Intelligent Control and Automation (**WCICA**), 2014.

PAPERS UNDER REVIEW

1. Surgical Instruments Instance Segmentation in Robot-assisted Surgery: Model Design and Cross-cohort Transfer Learning
   Xiaowen Kong, **Yueming Jin**, Qi Dou, Ziyi Wang, Zerui Wang, Erbao Dong, Pheng-Ann Heng, Yunhui Liu, Dong Sun
   Submitted to International Conference on Robotics and Automation (**ICRA**), 2020.

2. Automatic Gesture Recognition in Robot-assisted Surgery with Reinforcement Learning and Tree Search
   Xiaojie Gao, **Yueming Jin**, Qi Dou, Pheng-Ann Heng
   Submitted to International Conference on Robotics and Automation (**ICRA**), 2020.

AWARDS AND HONORS

Hong Kong PhD Fellowship	*2015-2019*
MedIA-MICCAI'17 Best Paper Award	*2017*
Winner of MICCAI Surgical Workflow Challenge on M2CAI	*2016*
Teaching Assistant of Merit	*2016*
Outstanding Graduates of Northeastern University	*2015*
National Scholarship of China	*2013, 2014*

PROFESSIONAL ACTIVITIES

Membership of IEEE, MICCAI, SIGGRAPH Society
Conference Review: MICCAI'19, MIDL'19, MICCAI'18
Journal Review: SPIE Journal of Medical Imaging, IEEE Access
Student Volunteer of 2016 SIGGRAPH Asia

TEACHING

CSCI3260 Principles of Computer Graphics	*2016, 2017 Fall*
CSCI2100 Data Structures	*2016, 2017 Spring*
ESTR2104 Digital Logic and Systems	*2015 Fall*

SKILLS

Programming	Python, C/C++, MATLAB
Toolkits	PyTorch, Caffe, Tensorflow, LATEX