

Lequan YU

CONTACT INFORMATION	Department of Computer Science and Engineering The Chinese University of Hong Kong Shatin, New Territories, Hong Kong	Phone: (852) 6484-4600 Email: lqyu@cse.cuhk.edu.hk www.cse.cuhk.edu.hk/~lqyu
RESEARCH INTERESTS	Deep learning for 3D understanding, medical image computing, deep learning for point cloud analysis	
EDUCATION	The Chinese University of Hong Kong , Hong Kong	
	Ph.D., Computer Science and Engineering	Aug 2015 to Present
	• Advisor: Pheng-Ann Heng & Chi-Wing Fu	Expected graduation: <u>07/2019</u>
	Zhejiang University , Hangzhou, China	
	B.S., Computer Science	Aug 2011 to Jul 2015
	• Advisor: Deng Cai	
	• GPA: 91.1/100 (3.92/4.0), Rank: 1/185	
EXPERIENCE	Research Intern	July 2018 to Present
	Nvidia, Bethesda, USA	
	Advisor: Dr. Daguang Xu and Dr. Dong Yang	
	Project: 3D reconstruction from the single view ultrasound image	
	Research Intern	Mar 2017 to Jul 2017
	Siemens Healthcare, Princeton, USA	
	Advisor: Dr. Kai Ma and Dr. Terrence Chen	
	Project: Body landmark detection from depth images via deep reinforcement learning	
	Research Assistant	Sep 2013 to Jun 2015
	State Key Laboratory of CAD & CG, Zhejiang University, China	
	Supervisor: Prof. Deng Cai	
CONFERENCE PUBLICATIONS	<ol style="list-style-type: none">1. Lequan Yu*, Xianzhi Li*, Chi-Wing Fu, Daniel Cohen-Or, Pheng-Ann Heng. "EC-Net: an Edge-aware Point set Consolidation Network." <i>ECCV</i>, 2018.2. Lequan Yu*, Xianzhi Li*, Chi-Wing Fu, Daniel Cohen-Or, Pheng-Ann Heng. "PU-Net: Point Cloud Upsampling Network." <i>CVPR</i>, 2018.3. Xiaomeng Li, Lequan Yu, Hao Chen, Qi Dou, Chi-Wing Fu, Pheng-Ann Heng. "Semi-supervised Skin Lesion Segmentation via Transformation Consistent Self-ensembling Model." <i>BMVC</i>, 20184. Lequan Yu, Jie-Zhi Cheng, Qi Dou, Xin Yang, Hao Chen, Jing Qin, Pheng-Ann Heng. "Automatic 3D Cardiovascular MR Segmentation with Densely-Connected Volumetric ConvNets." <i>MICCAI</i>, 2017.5. Lequan Yu, Xin Yang, Hao Chen, Jing Qin, Pheng-Ann Heng. "Volumetric ConvNets with Mixed Residual Connections for Automated Prostate Segmentation from 3D MR Images." <i>AAAI</i>, 2017. (Oral)6. Xin Yang, Lequan Yu, Shengli Li, Xu Wang, Na Wang, Jing Qin, Dong Ni, Pheng-Ann Heng. "Towards Automatic Semantic Segmentation in Volumetric Ultrasound." <i>MICCAI</i>, 2017. (Oral)	

7. Xin Yang, **Lequan Yu**, Lingyun Wu, Yi Wang, Dong Ni, Jing Qin, Pheng-Ann Heng. "Fine-grained Recurrent Neural Networks for Automatic Prostate Segmentation in Ultrasound Images." *AAAI*, 2017. **(Oral)**
8. Hao Chen, Xiaojuan Qi, **Lequan Yu**, Pheng-Ann Heng. "DCAN: Deep Contour-Aware Networks for Accurate Gland Segmentation." *CVPR*, 2016.
9. Qi Dou, Hao Chen, Yueming Jin, **Lequan Yu**, Jing Qin, Pheng-Ann Heng. "3D Deeply Supervised Network for Automatic Liver Segmentation from CT Volumes." *Medical Image Computing and Computer Assisted Intervention (MICCAI)*, 2016.
10. Hao Chen*, **Lequan Yu***, Qi Dou, et al. "Automatic Detection of Cerebral Microbleeds via Deep Learning Based 3D Feature Representation." *ISBI*, 2015. **(Oral)**

JOURNAL PUBLICATIONS

1. Xin Yang, **Lequan Yu**, Shengli Li, Huaxuan Wen, Dandan Luo, Cheng Bian, Jing Qin, Dong Ni, Pheng-Ann Heng. "Towards Automated Semantic Segmentation in Prenatal Volumetric Ultrasound." *IEEE Transactions on Medical Imaging (TMI)*, 2018.
2. **Lequan Yu**, Hao Chen, Qi Dou, Jing Qin, Pheng-Ann Heng. "Automated Melanoma Recognition in Dermoscopy Images via Very Deep Residual Networks." *IEEE Transactions on Medical Imaging (TMI)*, 2017
3. **Lequan Yu***, Hao Chen*, Qi Dou, Jing Qin, Pheng-Ann Heng. "Integrating Online and Offline 3D Deep Learning for Automated Polyp Detection in Colonoscopy Videos." *IEEE Journal of Biomedical and Health Informatics (J-BHI)*, 2017.
4. Qi Dou, **Lequan Yu**, Hao Chen, Yueming Jin, Xin Yang, Jing Qin, Pheng Ann Heng. "3D Deeply Supervised Network for Automated Segmentation of Volumetric Medical Images." *Medical Image Analysis (MedIA)*, 2017
5. Hao Chen, Qi Dou, **Lequan Yu**, Jing Qin, Pheng Ann Heng. "VoxResNet: Deep Voxelwise Residual Networks for Volumetric Brain Segmentation." *NeuroImage*, 2017
6. Hao Chen, Xiaojuan Qi, **Lequan Yu**, Qi Dou, Jing Qin, Pheng-Ann Heng. "DCAN: Deep contour-aware networks for object instance segmentation from histology images." *Medical Image Analysis (MedIA)*, 2017.
7. Yueming Jin, Qi Dou, Hao Chen, **Lequan Yu**, Jing Qin, Pheng Ann Heng. "SV-RCNet: Workflow Recognition from Surgical Videos using Recurrent Convolutional Network." *IEEE Transactions on Medical Imaging (TMI)*, 2017
8. Qi Dou, Hao Chen, **Lequan Yu**, Jing Qin, Pheng-Ann Heng. "Multi-level Contextual 3D CNNs for False Positive Reduction in Pulmonary Nodule Detection." *IEEE Transactions on Biomedical Engineering (TBME)*, 2016.
9. Qi Dou, Hao Chen, **Lequan Yu**, et al. "Automatic Detection of Cerebral Microbleeds from MR Images via 3D Convolutional Neural Networks." *TMI*, 2016.

SELECT HONORS AND AWARDS

Scholarships & Awards

- AAAI 2017 Scholarship, San Fransisco, USA
- China National Scholarship (1.8 %), 2012, 2013, 2014
- The He Zhijun Scholarship, 2014
Only one student selected from about 300 undergraduates in Computer College.
- Kwanjeong Educational Foundation Scholarship, 2012, 2013, 2014
- Meritorious Winner, Interdisciplinary Contest in Modeling(ICM), Consortium for Mathematics and Its Application, 2014

- The Outstanding Undergraduate Award, awarded by China Computer Federation, 2014
Only selected 100 undergraduates every year in China
- Outstanding Graduates of Zhejiang University and Zhejiang Province

TEACHING
EXPERIENCE

- CSCI1130 Introduction to Computing Using Java Fall 2015
- CSCI3180 Principles of Programming Languages Spring 2016
- ENGG5108 Big Data Analytics Fall 2016
- CSCI3150 Introduction to Operating Systems Spring 2017, Fall 2017, Spring 2018

SKILLS

- **Programming:** Python, C/C++, MATLAB
- **Tools:** TensorFlow, Caffe, Linux Shell, VTK