XIAOMENG LI

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EDUCATI

The Chinese University of Hong Kong, Hong Kong *2015 - Present*
PhD., Dept. of Computer science and Engineering, Expected: July 2019
Supervisor: Dr. Heng Pheng Ann and Dr. Chi-Wing Fu
Xi'Dian University, Xi'an, China **(211,985 platform)** *2010 - 2014*
B.Eng., Electrical Engineering.
GPA: 90/100 Rank: 3/150

RESEARCH INTERESTS

Medical Image Analysis, Semantic Segmentation, Semi-supervised and Unsupervised Learning, Generative Models, etc.

PUBLICATIONS

Xiaomeng Li, Lequan Yu et al. Semi-supervised Skin Lesion Segmentation via Transformation Equivariant Self-ensembling Model. **The British Machine Vision Conference (BMVC 2018)**.

Xiaomeng Li, Hao Chen, et al. H-DenseUNet: Hybrid densely connected UNet for liver and liver tumor segmentation from CT volumes. **IEEE Trans. Medical Imaging. (SCI, IF: 3.942)**

Xiaomeng Li, Qi Dou, Hao Chen, et al. 3D Multi-scale FCN with Random Modality Voxel Dropout Learning for Intervertebral Disc Localization and Segmentation from Multi-modality MR Images. **Medical Image Analysis, in press, 2018. (SCI, IF: 4.188)**

Lei Zhu, Weiming Wang, **Xiaomeng Li**, et al. Feature-Preserving Ultrasound Speckle Reduction via L_0 Minimization. **Neurocomputing (2018). (SCI, IF: 3.317)**

Lei Zhu, Weiming Wang, **Xiaomeng Li**, et al. Ultrasound Speckle Reduction via L_0 Minimization. Asian Conference on Computer Vision (ACCV). Springer, Cham, 2016: 50-65.

Xiaomeng Li, Qi Dou, Hao Chen, et al. Multi-scale and Modality Dropout Learning for Intervertebral Disc Localization and Segmentation. International Workshop on Computational Methods and Clinical Applications for Spine Imaging, held in conjunction with MICCAI, 2016. Springer, Cham: 85-91.

UNDER REVIEW PAPERS

Xiaomeng Li, Lequan Yu, et al. Deeply Supervised Rotation Equivariant Network for Lesion Segmentation in Dermoscopy Images. workshop of MICCAI 2018.

RESEARCH EXPERIENCES

Semantic Segmentation Aug. 2016 - Jan. 2017
Worldwide Competition on IVD Localization and Segmentation from 3D Multi-modality MR Images (MICCAI 2016)

· Won the **1st place** in the Competition.
· Proposed multi-scale fully convolutional network for IVD end-to-end localization and segmentation.
· Designed the random modality voxel dropout strategy to tackle the overfitting problem in multi-modality images.
· Code is implemented with Theano and the work is published in Journal of **Medical Image Analsis**.

Semantic Segmentation Feb. 2017 - Sep. 2017
Worldwide Competition on Liver Tumor Segmentation *(MICCAI 2017)*

- Won the **1st place** in the Competition. See `https://competitions.codalab.org/competitions/17094#results` **team name: xjqi**
- Proposed HDenseUNet to address the problems in lesion segmentation from 3D CT scans, where 2D convolutions negelect the spatil information along the third dimension and 3D convolutions have heavy computational costs.
- Code is implemented with Tensorflow and the work is under review at Journal of **IEEE Trans. Medical Imaging**

Semi-supervised Learning Oct. 2017 - Jan. 2018
Semi-supervised Learning for Lesion Segmentation via Self-ensembling Model

- Achieved the **1st place** with only 300 training lables in skin lesion segmentation benckmark, surpassing other results obtained in the fully-supervised training manner.
- Proposed the transformation equivariant self-ensembling model to segment lesions in the semi-supervised way.
- Code is implemented with Tensorflow and the work is under review at **BMVC 2018 conference**.

TEACHING EXPERIENCES

CSCI1540 Fundamental computing with C++	Fall 2015-2016
ENGG1100 Introduction to Engineering Design	Spring 2016
CSCI2100 Data structure	Fall 2016-2017
CSCI3310 Mobile Computing and Applications Development	Spring 2017
CSCI3310 Mobile Computing and Applications Development	Fall 2017-2018

AWARDS

Graduate Scholarship, Dept. of CSE, Chinese University of Hong Kong, 2015-2019

National Scholarship of China **(1 / 150)**, 2014

First-class Scholarship of Xidian University (5 / 150), 2013

Honorable Mention, Mathematical Contest in Modeling (MCM), 2013

National 2nd Prize, China Undergraduate Mathematical Contest in Modeling(CUMCM), 2012

TECHNICAL STRENGTHS

Computer Languages	C/C++, MATLAB, Python
Tools	Tensorflow, Pytorch, Theano, Keras, OpenGL