



## Education

### Hong Kong University of Science and Technology

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (CSE), SMART LAB

- Advisor: **Hao Chen**, Assistant Professor, HKUST
- Advisor: **Tim CHENG Kwang-Ting**, Professor, HKUST

*PhD*  
Since Aug. 2021

### Huazhong University of Science and Technology

SCHOOL OF ELECTRONIC INFORMATION AND COMMUNICATIONS (EIC), MC LAB

- Advisor: **Xin Yang**, Professor, HUST

*M.S.*  
Aug. 2017 - Jun. 2020

### Huazhong University of Science and Technology

SCHOOL OF ELECTRONIC INFORMATION AND COMMUNICATIONS (EIC)

- Major classes: Data Structure, Signal and Linear System, Computer Networks and Applications, etc.

*B.S.*  
Aug. 2012 - Jun. 2016

## Work Experience

### Tencent - *Jarvis Lab*

Supervised 5 interns; Published 3 papers; Winner of one competition; Managed 4 projects

*Research Engineer*  
Jul. 2020 - Jul. 2021

### Laifeng Middle School Attached to CCNU

Team-leader of Volunteer in HUST; **Physics Teacher** for two classes.

*Volunteer Teacher*  
Jul. 2016 - Aug. 2017

### SmartMore - *AI-Seg. Group*

Research Intern; Submitted one paper and one patent.

*Internship*  
Mar. 2022 - Oct. 2022

### Tencent - *YouTu Lab*

Research Intern; **Winner** of MICCAI 2019 AASCE Challenge.

*Internship*  
May 2019 - Sep. 2019

## Competition

- |   |   |   |
|---|---|---|
| 1 | <b>Automatic planning of radiotherapy dose distribution with Neural Architecture Search</b><br><b>Winner</b> in dose prediction task. Award: 50k CNY.   | <i>Tencent 2021 AIMIS Challenge</i><br>Aug. 2021 - Nov. 2021            |
| 2 | <b>Cerebral Aneurysm Detection, Segmentation and Rupture Risk Estimation</b><br><b>Winner</b> in detection task. <b>Winner</b> in segmentation task. <b>Winner</b> in rupture risk estimation task. | <i>MICCAI 2020 CADA Challenge</i><br>Jul. 2020 - Sept. 2020             |
| 3 | <b>Cerebral Aneurysm Detection and Segmentation.</b><br><b>Runner-up</b> in detection task. <b>Runner-up</b> in segmentation task.  | <i>MICCAI 2020 ADAM Challenge</i><br>Jul. 2020 - Sept. 2020             |
| 4 | <b>College Studnets' Internet+ Innovation and Entrepreneurship Competition</b><br><b>Gold Award</b> for "AI System Covid-19 Analysis".  | <i>6<sup>th</sup> "Internet+" Competition</i><br>Jul. 2020 - Sept. 2020 |
| 5 | <b>Automated Spinal Curvature Estimation.</b><br><b>Winner</b> in Cobb angle estimation task.   | <i>MICCAI 2019 AASCE Challenge</i><br>Jul. 2019 - Sept. 2019            |

## Reviewer

ECCV2022, CVPR 2022, ISBI 2022, CVPR 2021, ICCV 2021, IJCAI 2021, MICCAI 2021

IEEE Transactions on Neural Networks and Learning Systems (TNNLS)

IEEE Transactions on Medical Imaging (TMI)

Frontiers in Cardiovascular Medicine

Multimedia Systems, Medical Physics, IET Image Processing, etc.

## Activities & Awards

- 2020 **Outstanding Graduates**, Huazhong University of Science and Technology
- 2019 **Merit Student**, Huazhong University of Science and Technology
- 2019 **National Scholarship**, Huazhong University of Science and Technology
- 2019 **Student Travel Award**, MICCAI
- 2016 **Outstanding Volunteer**, The Communist Youth League of China
- 2016 **Outstanding Graduates**, Huazhong University of Science and Technology

## Publication (Selected)

### CONFERENCE

- 1 **InsMix: Towards Realistic Generative Data Augmentation for Nuclei Instance Segmentation** *MICCAI 2022*  
*Yi Lin*, Zeyu Wang, Kwang-Ting Cheng, Hao Chen
- 2 **Seg4Reg+: A Local and Global Consistency Learning between Spine Segmentation and CobbAngle Regression** *MICCAI 2021*  
*Yi Lin*, Luyan Liu, Kai Ma, Yefeng Zheng
- 3 **Triplet-Branch Network with Prior-Knowledge Embedding for Fatigue Fracture Grading** *MICCAI 2021*  
Yuexiang Li, Yanping Wang, Guang Lin, *Yi Lin*, ..., Yefeng Zheng
- 4 **A Hierarchical Feature Constraint to Camouflage Medical Adversarial Attacks** *MICCAI 2021*  
Qingsong Yao, Zecheng He, *Yi Lin*, Kai Ma, Yefeng Zheng, S. Kevin Zhou
- 5 **Automated Pulmonary Embolism Detection from CTPA Images using an End-to-End Convolutional Neural Network** *MICCAI 2019*  
*Yi Lin*, Jianchao Su, Xiang Wang, Xiang Li, Jingen Liu, Kwang-Ting Cheng, Xin Yang
- 6 **StitchAD-GAN for Synthesizing Apparent Diffusion Coefficient Images of Clinically Significant Prostate Cancer** *BMVC 2018*  
Zhiwei Wang, *Yi Lin*, Kwang-Ting Cheng, Xin Yang
- 7 **Seg4Reg Networks for Automated Spinal Curvature Estimation** *MICCAI 2019 workshop*  
*Yi Lin*, Hong-Yu Zhou, Kai Ma, Xin Yang, Yefeng Zheng
- 8 **Cerebral Aneurysm Rupture Risk Estimation Using XGBoost and Fully Connected Neural Network** *CADA 2020*  
Yanfei Liu, Yunqiao Yang, *Yi Lin*, Yuexiang Li, Dong Wei, Kai Ma, Yefeng Zheng

### JOURNAL

- 1 **Deep Learning for Computational Cytology: A Survey** *MedIA 2022*  
Hao Jiang, Yanning Zhou, *Yi Lin*, Ronald CK CHAN, Jiang Liu, Hao Chen. \*IF: 13.828
- 2 **A deep learning approach to predict conductive hearing loss in otitis media with effusion using otoscopic images** *JAMA Oto.-H. & N. S. 2022*  
Junbo Zeng\*, Weibiao Kang\*, Suijun Chen\*, *Yi Lin\**, ..., Yuexin Cai. \*IF: 8.961
- 3 **Semi-supervised mp-MRI Data Synthesis with StitchLayer and Auxiliary Distance Maximization** *MedIA 2020*  
Zhiwei Wang, *Yi Lin*, Kwang-Ting Tim Cheng, Xin Yang. \*IF: 8.880
- 4 **Bi-modality Medical Image Synthesis using Semi-supervised Sequential Generative Adversarial Networks** *JBHI 2019*  
Xin Yang (Advisor), *Yi Lin#*, ..., Kwang-Ting Cheng. \*IF: 4.217, # Corresponding Author
- 5 **A Two-Stage Convolutional Neural Network for Pulmonary Embolism Detection from CTPA Images** *IEEE Access 2019*  
Xin Yang (Advisor), *Yi Lin*, Jianchao Su, Xiang Wang, Xiang Li, Jingen Lin, Kwang-Ting Cheng. \*IF: 4.098
- 6 **Accurate Scoliosis Vertebral Landmark Localization on X-ray Images via Shape-constrained Multi-stage Cascaded CNNs** *Fundamental Research 2022*  
Zhiwei Wang, Yunqiao Yang, *Yi Lin*, Jinxin Lv, Xin Lie, Xin Yang

### SUBMITTED

- 1 **Deep Learning for Medical Image Segmentation: Tricks, Challenges and Future Directions** *TPAMI*  
Dong Zhang, *Yi Lin*, Hao Chen, Zhuotao Tian, Xin Yang, Jinhui Tang, Kwang Ting Cheng
- 2 **LE-NAS: Learning-based Ensemble with Neural Architecture Search for 3D Radiotherapy Dose Prediction** *Trans. on Cyber.*  
*Yi Lin*, Yanfei Liu, Hao Chen, ..., Kwang-Ting Cheng
- 3 **Label Propagation for Annotation-Efficient Nuclei Segmentation from Pathology Images** *MedIA*  
*Yi Lin*, Zhiyong Qu, Hao Chen, Zhongke Gao, Yuexiang Li, Lili Xia, Kai Ma, Yefeng Zheng, Kwang-Ting Cheng
- 4 **TBN-CROWN: Triplet-Branch Network with Contrastive Prior-Knowledge Embedding for Disease Grading** *TMI*  
Yuexiang Li, Yanping Wang, Guang Lin, *Yi Lin*, ..., Yefeng Zheng
- 5 **Adaptive Fusion of Deep Learning with Statistical Shape Model for Robust Patella Segmentation from CT Images** *Arti. Intel. In Med*  
Jiachen Zhao, Tianshu Jiang, *Yi Lin*, Justin Chan, Ping-Keung Chan, Chunyi Wen, Hao Chen