

Lipeng Liang

Room320, Building 10, Tongji University, Shanghai, 201804, P. R. China

(+86)18921123937 gaosaroma@outlook.com

EDUCATION

Department of Software Engineering, Tongji University, Shanghai, China

Sep 2016- Jun 2020

- B.E. in Software Engineering, Overall GPA: 3.72/4.0, Major GPA: 3.71/4.0
- Core Courses: Digital Image Processing, Computer Vision, Data Structure, Algorithm, C Programming, C++ Programming, Database Technologies and Applications, Operation Systems, Calculus, Linear Algebra

RESEARCH EXPERIENCES

Machine Learning Method for Uterine Fibroids Detection | Research Assistant

Jun 2018 -present

Advisor: Ye Luo, professor assistant at Department of Software Engineering, Tongji University

- Collected and analyzed current neural network likely to be used for uterine fibroids classification
- Helped to pre-process the uterine fibroids data with programming
- Assisted to apply fast-RCNN to uterine fibroids detection
- Proposed improvements to better uterine fibroids detection effect with edge detection

Saliency Guided Network for Pulmonary Nodule Classification | Research Assistant

Sep 2018- Dec 2018

Advisor: Ye Luo, professor assistant at Department of Software Engineering, Tongji University

- Collected and analyzed classical neural network with gate-mechanism
- Recurred part of Itti's paper about saliency map and applied to pulmonary nodule
- Proposed gate-mechanism for saliency guiding the pulmonary nodule classification
- 3rd author of "Saliency Guided Network for Pulmonary Nodule Classification" submitted to ICME 2019 (International Conference on medical education)

3D Spatial Pyramidal Dilated Network for Pulmonary Nodule Classification | Research Assistant

Dec 2017-Apr 2018

Advisor: Ye Luo, professor assistant at Department of Software Engineering, Tongji University

- Learned the basics of machine learning and recurred classical classification network like BPN, CNN and RNN
- Collected and analyzed current network for pulmonary nodule classification
- Published the paper "3D Spatial Pyramid Dilated Network for Pulmonary Nodule Classification" in *Symmetry* 2018

PUBLICATION

- 1. Guokai Zhang, Jihao Luo, Lipeng Liang, Pengcheng He, L. Itti Saliency Guided Network for Pulmonary Nodule Classification submitted to *ICME*, Dec 2018
- 2. Guokai Zhang, Xiao Liu, Dandan Zhu, Pengcheng He, Lipeng Liang, Ye Luo* and Jianwei Lu* 3D Spatial Pyramid Dilated Network for Pulmonary Nodule Classification. *Symmetry*. 2018; 10(9):376:2073-8994.

AWARDS

- The Second Prize of the National College Students Mathematical Modeling Competition Nov. 2018
- 2018 Tongji University First Class Scholarship (10/186) Nov. 2018
- 2018 "Chaingu Cup" 1st place of Blockchain Application Innovation Competition (1/96) Jun. 2018
- The 4th China "Internet +" College Students Innovation and Entrepreneurship Competition Silver Award May. 2018
- 2018 Microsoft Student Club Practice Space Station Outstanding Win (10/119) Aug. 2018
- 2017 Tongji University First Class Scholarship (10/196) Oct. 2017

LEADERSHIP AND ACTIVITIES

Student Information Management System Based on Blockchain | Project Leader

Apr 2018 - Present

- Led a group of 4 students to design and realize the system based on blockchain

Tongji University IBM Club | Student Union | Vice President

Sep 2018 - Present

- Responsible for recruiting new members for club and became the biggest club in our department
- Organized IBM Blue Gas Station activity for inviting the IBM staff to introduce IBM Watson in Tongji

SKILLS

- Programming Languages: python, C/C++, Matlab, javascript, java
- Applications: Microsoft Office Suite, JetBrains Suite, Maya