

SICHAO FU

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EDUCATION

Huazhong University of Science and Technology, Wuhan, Hubei Ph.D. in Information and Communication Engineering Supervisor Professor Xinge You	Sep. 2020– Now
China University of Petroleum (East China), Qingdao, Shandong M. Eng. in Electronics and Communication Engineering Supervisor Professor Weifeng Liu	Sep. 2017– Jun. 2020
Linyi University, Linyi, Shandong B. Eng. in Communication Engineering	Sep. 2013– Jun. 2017

RESEARCH INTERESTS

Graph theory based cross-modal retrieval

Graph Representation Learning/Graph convolution networks

Machine Learning/Deep Learning

POSTGRADUATE HONORS AND AWARDS

Outstanding Master's Thesis of Chinese Institute of Electronics, 2021

Second Prize of the First College Student Innovation Method Competition of Shandong Province, 2021

Doctor Academic Scholarship of Huazhong University of Science and Technology, 2020

Third Prize of Academic Degree Postgraduate Outstanding Achievement Award of Shandong Province, 2020

Third Prize of the Seventh College Student Science and Technology Innovation Competition of Shandong Province, 2020

Outstanding Master's Thesis of China University of Petroleum (East China), 2020

Outstanding Graduate of Shandong Province, 2020

First Prize of Professional Degree Postgraduate Outstanding Achievement Award of Shandong Province, 2019

China National Scholarship, 2019

First Prize of Academic Scholarship, 2019

Top Ten Postgraduate on Academic (Award Nomination) of China University of Petroleum (East China), 2019

Outstanding Postgraduate of China University of Petroleum (East China), 2019

Academic Star of College of Oceanography and Space Informatics of China University of Petroleum (East China), 2019

Third Prize of Academic Scholarship, 2017

PUBLICATIONS

Journal Papers

1. Sichao Fu, Weifeng Liu, Kai Zhang, Yicong Zhou and Dapeng Tao, "Semi-supervised Classification by Graph p -Laplacian Convolutional Networks", *Information Sciences*, accepted, 2021. (JCR: Q1; Impact factor: 5.91; CCF B)
2. Sichao Fu, Weifeng Liu, Weili Guan, Yicong Zhou, Dapeng Tao and Changsheng Xu, "Dynamic Graph Learning Convolutional Networks for Semi-supervised Classification", *ACM Transactions on Multimedia Computing Communications and Applications*, accepted, 2021. (JCR: Q1; Impact factor: 3.275; CCF B)
3. Weifeng Liu (supervisor), Sichao Fu, Yicong Zhou, Zheng-Jun Zha and Liqiang Nie, "Human Activity Recognition by Manifold Regularization Based Dynamic Graph Convolutional Networks", *Neurocomputing*, in press, 2021. (JCR: Q1; Impact factor: 4.438; CCF C)
4. Sichao Fu, Weifeng Liu, Dapeng Tao, Yicong Zhou and Liqiang Nie, "HesGCN: Hessian Graph Convolutional Networks for Semi-Supervised Classification", *Information Sciences*, vol. 514, pp. 484-498, 2020. (JCR: Q1; Impact factor: 5.91; CCF B)
5. Sichao Fu, Weifeng Liu, Yicong Zhou and Liqiang Nie, "HpLapGCN: Hypergraph p -Laplacian Graph Convolutional Networks", *Neurocomputing*, vol. 362, pp. 166-174, 2019. (JCR: Q1; Impact factor: 4.438; CCF C)
6. Sichao Fu, Weifeng Liu, Shuying Li and Yicong Zhou, "Two-Order Graph Convolutional Networks for Semi-Supervised Classification", *IET Image Processing*, vol. 13, no. 14, pp. 2763-2771, 2019. (JCR: Q2; Impact factor: 1.995; CCF C)

Conference Papers

7. Sichao Fu, Weifeng Liu, Yicong Zhou, Zheng-Jun Zha and Liqiang Nie, "Dynamic Graph Convolutional Networks by Manifold Regularization", *2019 IJCAI Workshop on Deep Learning for Human Activity Recognition (IJCAIW 2019)*, Macao, China, 2019.
8. Sichao Fu, Xinghao Yang and Weifeng Liu, "The Comparison of Different Graph Convolutional Neural Networks for Image Recognition", *2018 International Conference on Internet Multimedia Computing and Service (ICIMCS 2018)*, Nanjing, China, 2018.

Book Chapters

9. Sichao Fu and Weifeng Liu, "Recent Advances of Manifold-based Graph Convolutional Networks for Remote Sensing Images Recognition" in *Generalization with Deep Learning: For Improvement on Sensing Capability*, World Scientific, Book edited by: Dr. Chen Zhenghua, Dr. Wu Min and Dr. Li Xiaoli, in press, 2021.

Under Review Papers

10. Sichao Fu, Weifeng Liu, Kai Zhang and Yicong Zhou, "Example-Feature Graph Convolutional Networks for Semi-supervised Classification", *Neurocomputing*, Under Review. (JCR: Q1; Impact factor: 4.438; CCF C)

11. Jun Tang, Yan Gao, Sichao Fu, Weifeng Liu, Baodi Liu and Yanjiang Wang, “Combining Graph Convolutional Networks with Fisher Vector Encoding for Skeleton-Based Activity Recognition”, *IEEE Transactions on Emerging Topics in Computational Intelligence*, Under Review.

CHINA PATENTS

1. **Semi-supervised Classification Method based on Hypergraph p -Laplacian Graph Convolutional Neural Networks**
 - First Applicant
 - Patent for Invention
 - Open Number: CN109766935A
 - Open Date: 17 May, 2019
2. **Semi-supervised Classification Method based on p -Laplacian Graph Convolutional Neural Networks**
 - First Applicant
 - Patent for Invention
 - Open Number: CN109583519A
 - Open Date: 5 April, 2019

PROJECT

Under Study

1. Machine Learning based Remaining Oil Distribution Prediction
 - Project Member
 - Funded by: Major Scientific and Technological Projects of China National Petroleum Corporation.
 - Grant Number: ZD2019-183-008.
 - May 2020 - Dec. 2022
2. Research on the Efficient Local Geometry Preserving Methods of Graph Representation Learning and its Modeling Analysis
 - Student First Project Leader
 - Funded by: Open Project Program of the National Laboratory of Pattern Recognition (NLPR).
 - Grant Number: 202000009.
 - Jan. 2020 - Dec. 2021

Study Complete

3. Research on Semi-supervised Classification Method based on Graph Neural Networks
 - Project Leader
 - Funded by: Postgraduate Innovation Project, China University of Petroleum (East China).
 - Grant Number: YCX2019080.
 - May. 2019 - May. 2020
4. Research on Data Representation Learning Theory and Method based on Graph Neural Networks
 - Student First Project Leader
 - Funded by: Key Laboratory of Complex Systems Modeling and Simulation, Ministry of Education.
 - Jan. 2019 - Dec. 2020
5. Research on Person re-identification Algorithms based on Metric Learning
 - Project Member
 - Funded by: Postgraduate Innovation Project, China University of Petroleum (East China).

- Grant Number: YCX2018064.
- May 2018 - Dec. 2019
- 6. Research on Theory and Method of Large-scale Data Deep Structure Learning
 - Project Member
 - Funded by: Independent Innovation Research Project, China University of Petroleum (East China).
 - Grant Number: 18CX07011A.
 - Jan. 2018 - Dec. 2020
- 7. Image Annotation based on Mult-view Depth Sparse Coding and Manifold Regularization
 - Project Member
 - Funded by: National Natural Science Foundation of China.
 - Grant Number: 61671480.
 - Jan. 2017 - Dec. 2020

ACADEMIC ACTIVITIES

Ad-hoc reviewer	"IEEE Transactions on Neural Networks and Learning Systems"
	"IEEE Transactions on Cybernetics"
	"IEEE Transactions on Circuits and Systems for Video Technology"
	"IEEE Transactions on Geoscience and Remote Sensing"
	"IEEE Transactions on Emerging Topics in Computational Intelligence"
	"IEEE Access"
	"Neural Networks"
	"Information Sciences"
	"Neurocomputing"
	"Pattern Recognition"
	"Digital Signal Processing"
	"Artificial Intelligence in Medicine "
	"Neural Processing Letters"
	"Multimedia Tools and Applications "
	"Pattern Analysis and Applications "
	"Journal of Applied Remote Sensing "
	"IET Computer Vision "
	"Journal of Healthcare Engineering "
	"Signal, Image and Video Processing"
	"International Joint Conference on Artificial Intelligence"
	"International Conference on Information and Knowledge Management"
	"International Conference on Multimedia and Expo"
	"International Conference on Systems, Man, and Cybernetics"
	"International Conference on Machine Learning, Optimization, and Data Science"
	"Asian Conference on Pattern Recognition"
	"Chinese Conference on Pattern Recognition and Computer Vision"
	"ACM International Conference on Multimedia"
Attended conference	"2019 International Joint Conference on Artificial Intelligence"
	"2018 International Conference on Internet Multimedia Computing and Service"