Chunhui Zhang

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Personal Page: https://aragakiyuiii.github.io

EDUCATION &

Ph.D. student, Computer Science

Sep. 2021 - Present

EXPERIENCE

Brandeis University, Waltham, Massachusetts, US

the Michtom School of Computer Science

Advisors: Prof. Chuxu Zhang

B.S., Computer Science

Sep. 2017 - Jun. 2021

Northeastern University, Qinhuangdao, China School of Computer and Communication Engineering

GPA: 89.02/100.00

Research Assistant

Nov. 2018-Aug. 2021

the Chinese University of Hong Kong, China Shenzhen Research Institute of Big Data (SRIBD)

Advisors: Prof. Lei Cheng, Prof. Zhen Li

Developed a differentiable method for neural architecture search that does require much fewer GPU hours (80% computational cost reduction) on ImageNet.

RESEARCH INTEREST

- Efficient Machine Learning
- Trustworthy Representation Learning
- Graph Neural Network
- Multi-modality Learning

PAPER

- Chunhui Zhang, Yijun Tian, Mingxuan Ju, Zheyuan Liu, Yanfang Ye, Nitesh Chawla, and Chuxu Zhang. Chasing All-Round Graph Representation Robustness: Model, Training, and Optimization, The 11th International Conference on Learning Representations (ICLR), 2023.
- Zheyuan Liu*, Chunhui Zhang*, Yijun Tian, Erchi Zhang, Chao Huang, Yanfang Ye and Chuxu Zhang. G-Fame: Fair Graph Representation Learning via Diverse Mixture of Experts, International World Wide Web Conference (WWW), 2023.

Note: Co-first author Liu is an undergraduate who was mentored by me. A pleasant first experience as a mentor. Thanks Liu!

- Zhichun Guo, Chunhui Zhang, Yujie Fan, Yijun Tian, Chuxu Zhang, and Nitesh Chawla. Boosting Graph Neural Networks via Adaptive Knowledge Distillation, Thirty-Seventh AAAI Conference on Artificial Intelligence (AAAI), 2023.
- Yijun Tian, Kaiwen Dong, Chunhui Zhang, Chuxu Zhang, and Nitesh Chawla. Heterogeneous Graph Masked Autoencoders, Thirty-Seventh AAAI Conference on Artificial Intelligence (AAAI), 2023.
- Han Yue, Chunhui Zhang, Chuxu Zhang, and Hongfu Liu. Label-invariant Augmentation for Semi-Supervised Graph Classification, Thirty-sixth Conference on Neural Information Processing Systems (NeurIPS), 2022.
- Yiyue Qian, Chunhui Zhang, Yiming Zhang, Qianlong Wen, Yanfang Ye, and Chuxu Zhang. Co-Modality Imbalanced Graph Contrastive Learning, Thirtysixth Conference on Neural Information Processing Systems (NeurIPS), 2022.
- Chunhui Zhang, Chao Huang, Youhuan Li, Xiangliang Zhang, Yanfang Ye, and Chuxu Zhang. Look Twice as Much as You Say: Scene Graph Contrastive Learning for Self-Supervised Image Caption Generation, ACM International Conference on Information and Knowledge Management (CIKM), 2022.

- Jiele Wu, Chunhui Zhang, Zheyuan Liu, Erchi Zhang, Steven Wilson, and Chuxu Zhang. GraphBERT: Bridging Graph and Text for Malicious Behavior Detection on Social Media, *IEEE International Conference on Data Mining (ICDM)*, 2022.
- Chunhui Zhang, Chao Huang, Yijun Tian, Qianlong Wen, Zhongyu Ouyang, Youhuan Li, Yanfang Ye, Chuxu Zhang. Diving into Unified Data-Model Sparsity for Class-Imbalanced Graph Representation Learning, Thirty-sixth Conference on Neural Information Processing Systems-New Frontiers in Graph Learning Workshop (NeurIPS GLFrontiers Workshop), 2022.
- Qianlong Wen, Zhongyu Ouyang, **Chunhui Zhang**, Yiyue Qian, Yanfang Ye, Chuxu Zhang. Adversarial Cross-View Disentangled Graph Contrastive Learning, Thirty-sixth Conference on Neural Information Processing Systems-New Frontiers in Graph Learning Workshop (NeurIPS GLFrontiers Workshop), 2022.
- Chunhui Zhang*, Yongyuan Liang*, Yifan Jiang*. AdaSearch: Many-to-One Unified Neural Architecture Search via A Smooth Curriculum, AAAI-22 Workshop: Learning Network Architecture During Training.
- Chunhui Zhang, Xiaoming Yuan, Qianyun Zhang, Guangxu Zhu, Lei Cheng, and Ning Zhang. Towards Tailored Models on Private AIoT Devices: Federated Direct Neural Architecture Search, *IEEE Internet of Things Journal (IoTJ)*, Feb. 2022.
- Qin Wang, Weibing Zhao, Chunhui Zhang, Liyue Zhang, Changmiao Wang, Zhen Li, Shuguang Cui, Guanbin Li. 3d Enhanced Multi-scale Network For Thoracic Organs Segmentation, IEEE International Symposium on Biomedical Imaging Challenge, 2019

SKILLS

Programming Skills: C++, Python, PyTorch, MATLAB, Java Operating System: Linux

ACTIVITIES

- \bullet Conference reviewer for NeurIPS2022, CIKM2022, ICDM2022, IEEE HPCC2020, AAAI2023
- Journal reviewer for IEEE Transactions on Network Science and Engineering, ACM Transactions on Intelligent Systems and Technology, Neurocomputing

AWARDS

• CIKM Travel Grant Award 2022

Latest Update: Feb. 2023