

Chunhui Zhang

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Personal Page:

<https://aragakiyuuii.github.io>

EDUCATION & EXPERIENCE

Ph.D. student, Computer Science

Sep. 2021 - Present

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 at 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 not require much fewer GPU hours (80% computational cost reduction) on ImageNet.

RESEARCH INTEREST

- Efficient Machine Learning
- Trustworthy Representation Learning
- Graph Neural Network
- Natural Language Processing

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.
- **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.

- 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, *Thirty-sixth 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.
- Yijun Tian, Kaiwen Dong, **Chunhui Zhang**, Chuxu Zhang, Nitesh V. Chawla. Heterogeneous Graph Masked Autoencoders, *arXiv:2208.09957*, 2022.
- Zhichun Guo, **Chunhui Zhang**, Yujie Fan, Yijun Tian, Chuxu Zhang, Nitesh Chawla. Boosting Graph Neural Networks via Adaptive Knowledge Distillation, *arXiv:2210.05920*, 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

- 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