

# Chunhui Zhang

chunhuizhang@brandeis.edu

(+1) 7816521380

Volen Center, Brandeis University, 415 South St, Waltham, MA 02454

Personal Page:

<https://aragakiyuuii.github.io>

EDUCATION & EXPERIENCE	Ph.D. student, Computer Science <b>Brandeis University, Waltham, Massachusetts, US</b> the Michtom School of Computer Science Advisors: <b>Prof. Chuxu Zhang</b>	Sep. 2021 - Present
	B.S., Computer Science <b>Northeastern University, Qinhuangdao, China</b> School of Computer and Communication Engineering GPA: 89.02/100.00	Sep. 2017 - Jun. 2021
	Research Assistant <b>the Chinese University of Hong Kong, China</b> Shenzhen Research Institute of Big Data (SRIBD) Advisors: <b>Prof. Lei Cheng, Prof. Zhen Li</b> Developed a differentiable method for neural architecture search that does require much fewer GPU hours (80% computational cost reduction) on ImageNet.	Nov. 2018-Aug. 2021

## 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. 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, *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.
- **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 & 37th AAAI Conference on Artificial Intelligence-Workshop on DL-Hardware Co-Design for AI Acceleration (AAAI DCAA workshop), 2023 *Runner-up Award*.
- **Chunhui Zhang**, Hongfu Liu, Jundong Li, Yanfang Ye, Chuxu Zhang. Contrastive Graph Few-Shot 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**<sup>\*</sup>, Yongyuan Liang<sup>\*</sup>, Yifan Jiang<sup>\*</sup>. 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**, Liye 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, Git  
**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, Big Data

## AWARDS

- CIKM Travel Grant Award 2022
- AAAI-DCAA 2023 Runner-up Award 2023

Latest Update: March 2023