YONGJIAN ZHONG

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EDUCATION

Department of Computer Science, **The University of Iowa**, USA

PhD, Computer Science

School of Computer Science, **Wuhan University**, China

M.E, Applied Computer Technology

School of Physics and Technology, **Wuhan University**, China

B.S., Physics

Aug. 2021 - Present

Sep. 2016 - Jun. 2019

Sep. 2012 - Jun. 2016

EXPERIENCE

Lawrance Livermore National Laboratory

May 2023 - Aug. 2023

Research Intern

Livermore, USA

- · Supervisor: Dr. Jayaraman Thiagarajan
- · Topics: Long-tailed Link Prediction & Implicit Calibration

The University of Iowa

Jan. 2023 - Present

Research Assistant

Iowa City, USA

- · Supervisor: Prof. Bijaya Adhikari
- · Topics: Implicit models for dynamic graph learning
- · Compared to static graphs, dynamic graphs have another dimension to consider. It suffers more from the oversmoothing issue. Implicit models have the potential to tackle the oversmoothing problem, so we develop an implicit model for dynamic graph learning. This work has been submitted.

The University of Iowa

Jun. 2022 - Dec. 2022

Research Assistant

Iowa City, USA

- · Supervisor: Prof. Tianbao Yang
- · Topics: NDCG & Partial AUC Optimization
- · Using compositional optimization technique to maximize NDCG and partial AUC in large-scale problem setting. I wrote the code and conducted experiments on large-scale multi-label classification. The work on NDCG was accepted by ICML 2022, and the work on partial AUC was accepted by NeurIPS 2022

SIGMA Lab, Wuhan University

Jun. 2019 - Jul. 2021

Research Assistant

Wuhan, China

- · Supervisor: Prof. Bo Du
- · Topics: Multi-label Learning
- · Using self-paced learning to assign weight to multi-label samples in training. I proposed a method to calculate the weight for different samples by incorporating label correlation, and I conducted experiments to prove the effectiveness of this training scheme. This work was accepted by Neural Networks.

PUBLICATIONS

- Yongjian Zhong, Hieu Vu, Tianbao Yang, Bijaya Adhikari. "Implicit Neural Network for Dynamic Graphs" (In submission)
- Weiyu Huang, **Yongjian Zhong**, Bijaya Adhikari. "End-to-End Risk-aware Reinforcement Learning to Detect Asymptomatic Cases in Epidemic Outbreaks" (In submission)
- Bang An, Xun Zhou, **Yongjian Zhong**, Tianbao Yang. "SpatialRank: Urban Event Ranking with NDCG Optimization on Spatiotemporal Data" (In submission)
- Quanqi Hu, **Yongjian Zhong**, and Tianbao Yang. "Multi-block Min-max Bilevel Optimization with Applications in Multi-task Deep AUC Maximization." 2022 Conference on Neural Information Processing Systems (NeurIPS)
- Zhihao Qiu, Quanqi Hu, **Yongjian Zhong**, Lijun Zhang, Tianbao Yang. "Large-scale Stochastic Optimization of NDCG Surrogates for Deep Learning with Provable Convergence", 2022 International Conference on Machine Learning (ICML).
- Yongjian Zhong, Chang Xu, Bo Du, Lefei Zhang. "Learning to Reweight Examples in Multilabel Classification", Neural Networks, 2021, 142: 428-436.
- Mengqing Mei, **Yongjian Zhong**, Fazhi He, Chang Xu. "An Innovative Multi-label Learning Based Algorithm for City Data Computing", GeoInformatica 24.1 2020: 221-245.
- Yongjian Zhong, Chang Xu, Bo Du, Lefei Zhang. "Independent Feature and Label Components for Multi-label Classification", 2018 IEEE International Conference on Data Mining (ICDM). (Long paper)

TEACHING EXPERIENCE

TA - CS5430: Machine Learning	Fall 2021
TA - CS3330: Algorithm	Spring 2022

COMPUTER SKILLS

Languages & Libraries: Python, Matlab, Pytorch

AWARDS AND HONORS

The First-class Postgraduate Academic Scholarship	2018
Huanwu Peng Scholarship	2016
The First-class Scholarship of Wuhan University	2015
Huanwu Peng Scholarship	2015
The Second-class Scholarship of Wuhan University	2014