

# DONGSHENG LUO

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## EDUCATION

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- The Pennsylvania State University, PA, U.S.** *Aug. 2017 - Present*  
Ph.D. Student (**All but dissertation**)  
College of Information Science and Technology  
Advisor: Prof. Xiang Zhang
- Beihang University, Beijing, China** *Sep. 2013 - Jun. 2017*  
Bachelor Degree in Computer Science and Technology  
Advisor: Prof. Shuai Ma
- Technical University of Munich, Munich, Germany** *Apr. 2016 - Sep. 2016*  
Exchange Student

## RESEARCH INTEREST

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- Graph Mining
- Deep Learning
- Natural Language Processing

## RESEARCH EXPERIENCE

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- College of IST, The Pennsylvania State University** *Aug 2017 - Present*  
*Graduate Research Assistant*  
· Integrative Methods for Complex Network Analysis.
- NEC Laboratories America** *May 2020 - Aug 2020*  
*Graduate Intern*  
· Contrastive Learning for NLP.
- Big Data Lab, Baidu Research** *May 2019 - Aug 2019*  
*Graduate Intern*  
· Recommendation System.
- Advanced Innovation Center for Big Data and Brain Computing** *Aug. 2016 - Jul. 2017*  
*Undergraduate Intern*  
· Name disambiguation
- Institute of Advanced Computing Technology, Beihang University** *Jul. 2015 - Mar. 2016*  
*Undergraduate Intern*  
· Publication entity ranking.

## PUBLICATIONS

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## Submissions

u1. Social Recommendation System with Graph Neural Network (under review)

**Dongsheng Luo**, Xiang Zhang, Jun Huan, et al.

u2. Random Walk on Multi-Networks

**Dongsheng Luo**, Xiang Zhang, et al.

u3. RNN for Anomaly Precursor Detection (under review)

Dongkuan Xu, **Dongsheng Luo**, Xiang Zhang, et al.

u4. The Colored Random Walk (under review)

Yaowei Yan, **Dongsheng Luo**, Xiang Zhang, et al.

## Published & Accepted

1. **Dongsheng Luo**, Wei Cheng, Wenchao Yu, Bo Zong, Jingchao Ni, Haifeng Chen, Xiang Zhang “Learning to Drop: Robust Graph Neural Network via Topological Denoising” to appear in Proceedings of the 14th ACM International WSDM Conference (**WSDM**), 2021.

2. **Dongsheng Luo**, Wei Cheng, Dongkuan Xu, Wenchao Yu, Bo Zong, Haifeng Chen and Xiang Zhang. “Parameterized Explainer for Graph Neural Network ” to appear in Proceedings of 34th Conference on Neural Information Processing Systems (**NeurIPS**), 2020.

3. **Dongsheng Luo**, Yuchen Bian, Yaowei Yan, Xiao Liu, Jun Huan, and Xiang Zhang. “Local Community Detection in Multiple Networks.” In Proceedings of 26th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (**SIGKDD**),2020.

4. **Dongsheng Luo**, Jingchao Ni, Suhang Wang, Yuchen Bian, Xiong Yu, and Xiang Zhang. “Deep Multi-Graph Clustering via Attentive Cross-Graph Association.” In Proceedings of the 13th International Conference on Web Search and Data Mining (**WSDM**), 2020.

5. **Dongsheng Luo**, Shuai Ma, Yaowei Yan, Chunming Hu, Xiang Zhang, and Jinpeng Huai. “A Collective Approach to Scholar Name Disambiguation.” IEEE Transactions on Knowledge and Data Engineering (**TKDE**), 2020.

6. Yuchen Bian\*, **Dongsheng Luo**\*, Yaowei Yan, Wei Cheng, Wei Wang, and Xiang Zhang. “Memory-based random walk for multi-query local community detection.” Knowledge and Information Systems (**KAIS**) (2019) (\* Equal Contribution)

7. Yaowei Yan, Yuchen Bian, **Dongsheng Luo**, Dongwen Lee, and Xiang Zhang. “Constrained Local Graph Clustering by Colored Random Walk” In Proceedings of the International Conference on World Wide Web (**WWW**), 2019

8. Dongkuan Xu, Wei Cheng, **Dongsheng Luo**, Xiao Liu, Xiang Zhang. “Spatio-Temporal Attentive RNN for Node Classification in Temporal Attributed Graphs.” In Proceedings of the International Joint Conference on Artificial Intelligence (**IJCAI**), 2019

9. Dongkuan Xu, Wei Cheng, **Dongsheng Luo**, Yameng Gu, Xiao Liu, Jingchao Ni, Bo Zong, Haifeng Chen, Xiang Zhang. “Adaptive Neural Network for Node Classification in Dynamic Networks.” In Proceedings of the IEEE International Conference on Data Mining (**ICDM**), 2019

10. Yuchen Bian, Yaowei Yan, Wei Cheng, Wei Wang, **Dongsheng Luo**, and Xiang Zhang. “On Multi-Query Local Community Detection.” In Proceedings of the IEEE International Conference on Data Mining (**ICDM**), 2018 (**Best Paper Candidate**)

11. Shuai Ma, Chen Gong, Renjun Hu, **Dongsheng Luo**, Chunming Hu, and Jinpeng Huai. “Query Independent Scholarly Article Ranking.” In Proceedings of the IEEE International Conference on Data Engineering (**ICDE**), 2018

12. Yaowei Yan, **Dongsheng Luo**, Jingchao Ni, Hongliang Fei, Wei Fan, Xiong Yu, John Yen, and Xiang Zhang. “Local Graph Clustering by Multi-Network Random Walk with Restart.” In Proceedings of the Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD), 2018

13. **Dongsheng Luo**, Chen Gong, Renjun Hu, Liang Duan, and Shuai Ma. “Ensemble Enabled Weighted PageRank.” The WSDM Cup 2016 - Entity Ranking Challenge, San Francisco, CA, USA, 2016. (**The 2nd place in the final ranking**)

## TEACHING ASSISTANT EXPERIENCES

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### **IST210 - Organization of Data**

Fall 2020, Fall 2019

· Instructor: Prof. Xiang Zhang

### **IST558 - Data Mining II**

Spring 2020

· Instructor: Prof. Xiang Zhang

### **IST242: Intermediate & Object-Oriented Application Development**

Spring 2019

· Instructor: Mr. Yaowei Yan

## PROFESSIONAL SERVICES

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PC Member: KDD'20, AAAI'21

External Conference Reviewer: ICDM'18, KDD'18, SDM'18, WSDM'19, AAAI'19, SDM'19, KDD'19, CIKM'19, ICDM'19, AAAI'20, WWW'20, WSDM'21, WWW'21, AAAI'21, SDM'21

## HONORS AND AWARDS

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KDD Registration Award

*Aug. 2020*

IST Travel Award

*Feb. 2020*

ICDM 2018 Best Paper Candidate

*Dec. 2018*

Outstanding Graduate Student of Beijing City

*Jun. 2017*

Outstanding Undergraduate Thesis of SCSE, Beihang University

*Jun. 2017*

Second Prize Feng Ru Cup competition in science and technology, BUAA

*Apr 2016*

CSC Outstanding Undergraduate Exchange Program Award

*Apr 2016*

Honorable Mention of American MCM

*Apr 2016*

2nd place of WSDM CUP 2016

*Jan 2016*

The Third Prize Qian-Shen Scholarship, Beihang University

*Dec 2015*

Outstanding Students of Beihang University

*Nov 2015*

The First Prize Scholarship of Beihang University

*Nov 2015*

Chinese Undergraduate National Scholarship

*Oct 2015*

Merit Students of Beihang University

*Jul 2015*

The First Prize Qian-Shen Scholarship

*Dec 2014*

Chinese Undergraduate National Scholarship

*Oct 2014*

## TECHNICAL STRENGTHS

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### **Programming Languages**

C/C++, Python, Java, SQL

### **Software & Tools**

Tensorflow, Pytorch, LaTeX, Gnuplot