

Dr. Chuxu Zhang

Assistant Professor
Department of Computer Science
Brandeis University

Mobile: +1(732)763-1281
Email: chuxuzhang@brandeis.edu
Webpage: chuxuzhang.github.io

RESEARCH INTERESTS

General Interests: Artificial Intelligence, Machine Learning, Deep Learning, Data Mining

Recent Focuses: Graph Mining and Learning, Recommendation Systems and User Modeling, Time Series and Spatial-temporal Learning

Applications: Social & Knowledge Systems, Cybersecurity, Healthcare & Food

PROFESSIONAL EXPERIENCES

Tenure-Track Assistant Professor, Department of Computer Science
Brandeis University, Waltham, MA, July 2020 - Present

Research Intern, Knowledge Technologies and Intelligent Experiences Group
Microsoft Research AI, Redmond, WA, Summer 2019

Research Intern, Data Science Group
NEC Labs America, Princeton, NJ, Summer 2018

EDUCATION

PhD, Computer Science and Engineering, University of Notre Dame, Notre Dame, IN, 2020

MS, Computer Science, Rutgers University, New Brunswick, NJ, 2017

BE, Electronic and Information Engineering, University of Electronic Science and Technology of China, Chengdu, China, 2013

SELECTED PUBLICATIONS

My name is highlighted in bold, underlined authors are students mentored/advised by me.

18: [**NeurIPS'21**] Y. Qian, Y. Zhang, Y. Ye, **C. Zhang**, Distilling Meta Knowledge on Heterogeneous Graph for Illicit Drug Trafficker Detection on Social Media, Conference on Neural Information Processing Systems, 2021

17: [**IJCAI'21**] Y. Qian, Y. Zhang, Y. Ye, **C. Zhang**, Adapting Meta Knowledge with Heterogeneous Information Network for COVID-19 Themed Malicious Repository Detection, International Joint Conference on Artificial Intelligence, 2021

16: [**WWW'21**] Z. Guo, **C. Zhang**, W. Yu, J. Herr, O. Wiest, M. Jiang, N. Chawla, Few-Shot Graph Learning for Molecular Property Prediction, The Web Conference, 2021

15: [**TOIS**] **C. Zhang**, J. Kiseleva, S. Jauhar, R. White, Grounded Task Prioritization with Context-Aware Sequential Ranking, ACM Transactions on Information Systems, 2021

14: [**TOIS**] **C. Zhang**, H. Yao, L. Yu, C. Huang, D. Song, H. Chen, M. Jiang, N. Chawla, Inductive Contextual Relation Learning for Personalization, ACM Transactions on Information Systems, 2021

13: [**EMNLP'20**] **C. Zhang**, L. Yu, M. Saebi, M. Jiang, N. Chawla, Few-Shot Multi-Hop Relation Reasoning over Knowledge Bases, The Conference on Empirical Methods in Natural Language Processing (Findings), 2020

12: [**AAAI'20**] **C. Zhang**, H. Yao, C. Huang, M. Jiang, Z. Li, N. Chawla, Few-Shot Knowledge Graph Completion, AAAI Conference on Artificial Intelligence, 2020

11: [**IJCAI'20**] C. Huang, **C. Zhang**, P. Dai, L. Bo, Cross-Interaction Hierarchical Attention Networks for Urban Anomaly Prediction, International Joint Conference on Artificial Intelligence, 2020

- 10: [AAAI'20] H. Yao, **C. Zhang**, W. Yin, M. Jiang, S. Wang, J. Huang, N. Chawla, Z. Li, Graph Few-shot Learning via Knowledge Transfer, The AAAI Conference on Artificial Intelligence, 2020
- 9: [KDD'19] **C. Zhang**, D. Song, C. Huang, A. Swami, N. Chawla, Heterogeneous Graph Neural Network, ACM SIGKDD Conference on Knowledge Discovery and Data Mining, 2019 (**By 09/2021, 270+ Citations**)
- 8: [AAAI'19] **C. Zhang**, D. Song, Y. Chen, X. Feng, C. Lumezanu, W. Cheng, J. Ni, B. Zong, H. Chen, N. Chawla, A Deep Neural Network for Unsupervised Anomaly Detection and Diagnosis in Multivariate Time Series Data, AAAI Conference on Artificial Intelligence, 2019 (**By 09/2021, 180+ Citations**)
- 7: [AAAI'19] L. Yu, **C. Zhang**, S. Liang, X. Zhang, Multi-order Attentive Ranking Model for Sequential Recommendation, AAAI Conference on Artificial Intelligence, 2019
- 6: [WSDM'19] **C. Zhang**, A. Swami, N. Chawla, SHNE: Representation Learning for Semantic-Associated Heterogeneous Networks, ACM International Conference on Web Search and Data Mining, 2019
- 5: [WWW'19] C. Huang, **C. Zhang**, J. Zhao, X. Wu, D. Yin, N. Chawla, MiST: A Multiview and Multimodal Spatial-Temporal Learning Framework for Citywide Abnormal Event Forecasting, The Web Conference, 2019 (**Best Paper Award Shortlist**)
- 4: [IJCAI'18] **C. Zhang**, L. Yu, X. Zhang, N. Chawla, Task-Guided and Semantic-Aware Ranking for Academic Author-Paper Correlation Inference, International Joint Conference on Artificial Intelligence, 2018
- 3: [WWW'18] **C. Zhang**, C. Huang, L. Yu, X. Zhang, N. Chawla, Camel: Content-Aware and Meta-path Augmented Metric Learning for Author Identification, The Web Conference, 2018
- 2: [AAAI'18] L. Yu, **C. Zhang**, S. Pei, G. Sun, X. Zhang, WalkRanker: A Unified Pairwise Ranking Model with Multiple Relations for Item Recommendation, AAAI Conference on Artificial Intelligence, 2018
- 1: [SDM'17] **C. Zhang**, L. Yu, Y. Wang, C. Shah, X. Zhang, Collaborative User Network Embedding for Social Recommender Systems, SIAM International Conference on Data Mining, 2017

PROFESSIONAL SERVICE

Journal Editor

- Big Data (Associate Editor, 2020 - Present)
- Frontiers in Big Data (Guest Editor)

Journal Reviewer

- IEEE Transactions on Knowledge and Data Engineering (TKDE)
- ACM Transactions on Information Systems (TOIS)
- IEEE Transactions on Neural Networks and Learning Systems (TNNLS)
- ACM Transactions on Knowledge Discovery from Data (TKDD)
- IEEE Transactions on Big Data (TBD)
- etc.

Conference (Senior) Program Committee Member

- Conference on Neural Information Processing Systems (NeurIPS): 2021, 2020
- International Conference on Machine Learning (ICML): 2021
- International Conference on Learning Representations (ICLR): 2022, 2021, 2020
- SIGKDD Conference on Knowledge Discovery and Data Mining (KDD): 2021, 2020
- The Web Conference (WWW): 2022, 2021
- AAAI Conference on Artificial Intelligence (AAAI): 2022 (SPC), 2021 (SPC), 2020
- International Joint Conference on Artificial Intelligence (IJCAI): 2022, 2021 (SPC), 2020
- ACM International Conference on Web Search and Data Mining (WSDM): 2021
- ACM International Conference on Information and Knowledge Management (CIKM): 2021
- IEEE International Conference on Data Mining (ICDM): 2021, 2020
- SIAM International Conference on Data Mining (SDM): 2021, 2020