

Zhichao Huang

@ iceshzc@gmail.com

🏠 cshzc.top

📍 Beijing, China

🏢 JD Intelligent Cities Research

🎓 Doctor of Engineering in Computer Software and Theory

🐙 github.com/iceshzc

🌐 LinkedIn

🔍 Google Scholar

👤 Short Bio

Dr. Zhichao Huang was born in November 1991 and currently serves as an Algorithm Application Engineer at JD Intelligent Cities Research, having studied under Professor Yunming Ye, who is not only the Secretary of the CPC Committee and Deputy Dean of the School of Computer Science and Technology at Harbin Institute of Technology, Shenzhen, but also the Director of a Key Laboratory in Shenzhen and the Director of the Big Data Technology Research Center. Huang completed his Bachelor's degree in Computer Science and Technology from Nanchang University in 2013, followed by his Master's and Doctoral degrees in Computer Software and Theory from Harbin Institute of Technology, Shenzhen in 2016 and 2021, respectively. Throughout his academic journey, Huang has authored or co-authored a total of 19 papers in prestigious international journals and conferences, which include CVPR, IJCAI, IEEE TGRS/TCSVT, Neural Networks, COLING, ICASSP, accumulating over 256 citations.

Research Interests: Graph Neural Networks, Knowledge Graphs, Spatio-Temporal Data Mining.

🎓 Education

2021.09, 2016.09	Ph.D. in Computer Software and Theory, Harbin Institute of Technology, Shenzhen Supervisor: Prof. Yunming Ye
2016.06, 2014.09	M.S. in Computer Science and Technology, Harbin Institute of Technology, Shenzhen Supervisor: Prof. Yunming Ye
2013.06, 2009.09	B.E. in Computer Science and Technology, Nanchang University Supervisor: Prof. Meng Chen

📁 Work Experience

2022.07 2021.11	Doctor Management Trainee @ JD.COM <ul style="list-style-type: none">➤ Conducted extensive data analysis on JD Retail and Industrial datasets, devising algorithms for the "one product, multiple suppliers" model and industrial classification frameworks.➤ Investigated the application of graph neural networks in combinatorial optimization problems using JD Logistics data.➤ Authored a chapter on Hyperparameter Optimization (HPO) for the book 'AutoML' while working at JD Explore Academy.
--------------------	--

2021.09	Graduate Student @ Harbin Institute of Technology, Shenzhen · Big Data Research Center
2014.09	<ul style="list-style-type: none"> › Engaged in social network analysis, primarily clustering attributed graphs and published related papers. › Studied the impact of different sampling methods in tree ensemble learning models for classification tasks and wrote related research reports. › Participated in the "Harbin Institute of Technology - Gridsum" collaborative project, responsible for text mining and user profiling generation. › Multiple involvements in writing grant proposals for the National Natural Science Foundation of China, Shenzhen Science and Technology Innovation Committee funds, and Guangdong Provincial Natural Science Foundation, and served as lead author on the successful NSFC-Universal Technology Basic Research Joint Fund No. U1836107. › Conducted research on multi-relational graph representation learning and multi-graph fusion methods, resulting in several published papers.
2018.09	Intern @ Tencent AI Lab · Machine Learning Center
2017.11	<ul style="list-style-type: none"> › Researched topics related to graph deep learning, including graph alignment, graph classification, and recommendation systems based on graphs, utilizing large-scale product training data to develop effective Top-N item recall systems.
2015.05	Visiting Student @ Chinese Academy of Sciences Shenzhen Institutes of Advanced Technology · High Performance Computing Technology Research Center
2015.01	<ul style="list-style-type: none"> › Conducted research on space big data mining, specifically in satellite image data analysis and mining, realizing a relevant model based on random forests.

Publication

- [1] **Zhichao Huang**, Xutao Li, Yunming Ye, and Michael K Ng. Mr-gcn: Multi-relational graph convolutional networks based on generalized tensor product. In *Proceedings of International Joint Conference on Artificial Intelligence (IJCAI)*, pages 1258–1264, 2020. **(CCF-A Conference, Cites 35 times)**.
- [2] **Zhichao Huang**, Xutao Li, Yunming Ye, Baoquan Zhang, Guangning Xu, and Wensheng Gan. Multi-view knowledge graph fusion via knowledge-aware attentional graph neural network. *Applied Intelligence*, pages 1–20, 2022. **(IF=5.3, JCR Q2, CAS Rank 2, Cites 7 times)**.
- [3] **Zhichao Huang**, Xutao Li, Yunming Ye, Feng Li, Feng Liu, and Yuan Yao. Tlvane: a two-level variation model for attributed network embedding. *Neural Computing and Applications*, 32:4835–4847, 2020. **(IF=6, JCR Q2, CAS Rank 3, Cites 2 times)**.
- [4] **Zhichao Huang**, Yuxi Sun, Yunming Ye, Wensheng Gan, and Wei-Che Chien. Inama: An interactive attentional model for node alignment. *Journal of Internet Technology*, 22(7):1587–1597, 2021. **(IF=1.6, JCR Q4, CAS Rank 4, SCI)**.
- [5] Jinjin Guo, **Zhichao Huang***, Guangning Xu, Bowen Zhang, and Chaoqun Duan*. Knowledge-aware few shot learning for event detection from short texts. In *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, 2023. **(CCF-B Conference, Cites 1 times)**.
- [6] Guangning Xu, Jinyang Yang, Jinjin Guo, **Zhichao Huang***, and Bowen Zhang*. Int-gnn: a user intention aware graph neural network for session-based recommendation. In *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, 2023. **(CCF-B Conference, Cites 3 times)**.
- [7] **Zhichao Huang**, Xutao Li, and Yunming Ye. Aligning users across social networks via intra and inter attentions. In *Web and Big Data: 4th International Joint Conference, APWeb-WAIM 2020, Tianjin, China, September 18-20, 2020, Proceedings, Part I 4*, pages 162–169. Springer, 2020. **(CCF-C Conference, Cites 2 times)**.
- [8] **Zhichao Huang**, Yunming Ye, Xutao Li, Feng Liu, and Huajie Chen. Joint weighted nonnegative matrix factorization for mining attributed graphs. In *Advances in Knowledge Discovery and Data Mining: 21st Pacific-Asia*

Conference, PAKDD 2017, Jeju, South Korea, May 23-26, 2017, *Proceedings, Part I* 21, pages 368–380. Springer, 2017. **(CCF-C Conference, Cites 32 times)**.

- [9] Bowen Zhang, Daijun Ding, **Zhichao Huang**, Ang Li, Yangyang Li, Baoquan Zhang, and Hu Huang. Knowledge-augmented interpretable network for zero-shot stance detection on social media. *IEEE Transactions on Computational Social Systems*, 2024. **(IF=5.2, JCR Q1, CAS Rank 2)**.
- [10] Guangning Xu, Michael K Ng, Yunming Ye, Xutao Li, Ge Song, Bowen Zhang, and **Zhichao Huang**. Tls-mwp: A tensor-based long-and short-range convolution for multiple weather prediction. *IEEE Transactions on Circuits and Systems for Video Technology*, 2024. **(IF=7.1, JCR Q1, CAS Rank 1, TOP SCI)**.
- [11] Guangning Xu, Yan Li, Chi Ma, Xutao Li, Yunming Ye, Qingquan Lin, **Zhichao Huang**, and Shidong Chen. Tfg-net: Tropical cyclone intensity estimation from a fine-grained perspective with the graph convolution neural network. *Engineering Applications of Artificial Intelligence*, 118:105673, 2023. **(IF=7.802, JCR Q1, CAS Rank 2, TOP SCI Cites 3 times)**.
- [12] Bowen Zhang, Daijun Ding, Guangning Xu, Jinjin Guo, **Zhichao Huang**, and Xu Huang. Twitter stance detection via neural production systems. In *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, 2023. **(CCF-B Conference)**.
- [13] Guangning Xu, Xutao Li, Shanshan Feng, Yunming Ye, Zhihua Tu, Kenghong Lin, and **Zhichao Huang**. Ls-ntp: Unifying long-and short-range spatial correlations for near-surface temperature prediction. *Neural Networks*, 155:242–257, 2022. **(IF=9.657, JCR Q1, CAS Rank 1, TOP SCI, Cites 3 times)**.
- [14] Daijun Ding, Li Dong, **Zhichao Huang**, Guangning Xu, Xu Huang, Bo Liu, Liwen Jing, and Bowen Zhang. Edda: A encoder-decoder data augmentation framework for zero-shot stance detection. In *Proceedings of the 30th International Conference on Computational Linguistics (COLING)*, 2024. **(CCF-B Conferences)**.
- [15] Bowen Zhang, Xu Huang, **Zhichao Huang**, Hu Huang, Baoquan Zhang, Xianghua Fu, and Liwen Jing. Sentiment interpretable logic tensor network for aspect-term sentiment analysis. In *Proceedings of the 29th International Conference on Computational Linguistics (COLING)*, pages 6705–6714, 2022. **(CCF-B Conference, Cites 10 times)**.
- [16] Yuxi Sun, Shanshan Feng, Yunming Ye, Xutao Li, Jian Kang, **Zhichao Huang**, and Chuyao Luo. Multisensor fusion and explicit semantic preserving-based deep hashing for cross-modal remote sensing image retrieval. *IEEE Transactions on Geoscience and Remote Sensing*, 60:1–14, 2021. **(IF=8.125, JCR Q1, CAS Rank 1, TOP SCI, Cites 30 times)**.
- [17] Baoquan Zhang, Xutao Li, Yunming Ye, **Zhichao Huang**, and Lisai Zhang. Prototype completion with primitive knowledge for few-shot learning. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, pages 3754–3762, 2021. **(CCF-A Conference, Cites 108 times)**.
- [18] Yuan Yao, Xutao Li, Yunming Ye, Feng Liu, Michael K Ng, **Zhichao Huang**, and Yu Zhang. Low-resolution image categorization via heterogeneous domain adaptation. *Knowledge-Based Systems*, 163:656–665, 2019. **(IF=8.139, JCR Q1, CAS Rank 1, TOP SCI, Cites 14 times)**.
- [19] Yuan Yao, Yan Li, Ke Wang, **Zhichao Huang**, and Yunming Ye. A semi-supervised clustering method through bottleneck distance exploration. In *2016 9th International Conference on Service Science (ICSS)*, pages 115–121. IEEE, 2016. **(EI)**.

Honor & Award

2023	“Yi Qilin” Excellent Talent by Beijing Economic-Technological Development Area
2016 - 2020	Ph.D. Scholarship at Harbin Institute of Technology
2016	Outstanding Graduate of Harbin Institute of Technology, Shenzhen
2015	Excellent Graduate of Harbin Institute of Technology, Shenzhen
2014 - 2015	First-Class Scholarship at Harbin Institute of Technology
2012	First-Class Scholarship at Nanchang University
2010 - 2011	Second-Class Scholarship at Nanchang University

Academic Position & Activity

- 2024 **IJCAI, ACM MM, ICASSP, ACM TIST** Reviewer
- 2023 **IJCAI, The Journal of Supercomputing, ICASSP, Neural Networks, ACM TIST, International Journal of Machine Learning and Cybernetics** Reviewer
- 2023 Attended and assisted in organizing the “Sixth Smart Cities and Urban Computing Forum” at CNCC’23 in Shenyang, China
- 2021 – 2022 **IJCAI** and **AAAI** Reviewer
- 2021 Presented an oral report at the online version of IJCAI’20
- 2020 **Future Generation Computer Systems** Reviewer
- 2020 Presented an oral report at the online version of APWeb-WAIM’20
- 2017 Delivered an oral presentation at the PAKDD’17 conference held in Jeju Island, South Korea
- 2016 Participated in the SMP’16 conference in Nanchang, China
- 2016 Participated in the CCKS’16 conference in Beijing, China