Jiaxu Cui(崔佳旭)

(Postdoc)Tel: +86-18626675276E-mail: cjx@jlu.edu.cnPersonal website: https://csjtx1021.github.ioCollege of Computer Science and Technology, Jilin University, Changchun 130012, China.



Summary

I am a postdoc in Jilin University, selected into Jilin University "Dingxin Scholar" Program. I received the B.Sc., M.S. and Ph.D. degrees from Jilin University in 2013, 2016, and 2021, respectively. I have visited Dr. Xia Hu's group at Texas A&M in 2018 and Prof. Jiming Liu's group at Hong Kong Baptist University in 2019-2020, and worked as an intern in Huawei in 2020-2021. My thesis was awarded as Excellent Doctoral Thesis by the Jilin University in 2021. My survey paper has been awarded as the "High Impact Paper of Journal of Software in 2020". I participated in the 1ST CHINA POSTDOCTORAL INNOVATION & ENTREPRENEURSHIP COMPETITION, and won the WINNING prize (top 14%). My main research interests include complex network analysis and optimization, intelligent optimization and network representation learning. I have published over 10 high-quality papers in international conferences and journals including AAAI, IEEE Trans. Comput. Aided Des. Integr. Circuits Syst., IEEE Trans. Neural Networks Learn. Syst. (IF=14.3), and have served as reviewers in several major academic conferences and journals, including AAAI, IJCAI, TNNLS, TBD, IJMLC, and TWEB.

Education Background

- 2016 2021: PhD.S. major in Computer Software and Theory, College of Computer Science and Technology, Jilin University, China. Supervisor: Prof. Bo Yang
- 2013 2016: M.S. major in Software Engineering, Software College of Jilin University, China. Supervisor: Prof. Yonggang Zhang
- 2009 2013: B.S. major in Software Engineering, Software College of Jilin University, China.

Research Experience

2021.07 – present: Postdoc in Jilin University, selected into Jilin University "Dingxin Scholar" Program. Under the guidance of Prof. Bo Yang.

2020.10 - 2021.01: Worked as an intern in Huawei.

2019.08 - 2020.06: Visited Prof. Jiming Liu's group at Hong Kong Baptist University as an exchange student.

2018.07 - 2018.10: Visited Dr. Xia Hu's group at Texas A&M as a visiting student.

My research interests include Bayesian optimization, complex network analysis, intelligent optimization, network representation learning.

My research projects include:

- China Postdoctoral Science Foundation Funded Project under Grant No.2021M701388, 2022-2023
- The Sixth Jilin Province Youth Science and Technology Talent Support Project
- Jilin University "Dingxin Scholar" Support Project

Research projects I am participating in and participated in include:

- National Key R&D Program of China under Grant Nos. 2021ZD0112501 and 2021ZD0112502;
- National Natural Science Foundation of China under Grant Nos. 62172185 and 61876069;
- Jilin Province Key Scientific and Technological Research and Development Project: Research, development and application of fast knowledge sharing system in the era of big data and mobile Internet (20180201067GX);
- Jilin Province Key Scientific and Technological Research and Development Project (20180201044GX);
- Jilin Province Natural Science Foundation: 20200201036JC;
- Hong Kong Research Grants Council (RGC) under project RGC/HKBU12201318;
- Cooperation project with Huawei: Adaptive intelligent fault detection and diagnosis system based on prior knowledge.

Honors & Scholarships

- 2022: Our survey paper "Survey on Bayesian Optimization Methodology and Applications" has been awarded as the "High Impact Paper of Journal of Software in 2020"
- 2021: Participated in the 1ST CHINA POSTDOCTORAL INNOVATION & ENTREPRENEURSHIP COMPETITION, and won the WINNING prize (top 14%).
- 2021: My thesis was awarded as Excellent Doctoral Thesis by the Jilin University. Doctoral Thesis: Bayesian Graph Optimization: Cost-Aware Network Optimization Theory and Method. Supervisor: Prof. Bo Yang
- 2018 First prize at the 11th Ph.D. Academic Forum of Jilin University
- 2009-2010, 2011-2012, 2018, 2019 Academic Scholarship

Publications

- [1]. Xiaohui Wei, Bingyi Sun, **Jiaxu Cui***, Meikang Qiu. Location-and-Preference Joint Prediction for Task Assignment in Spatial Crowdsourcing. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (IEEE TCAD), 2022. (CCF A)
- [2]. **Jiaxu Cui**, Bo Yang, Bingyi Sun, and Jiming Liu. Cost-Aware Graph Generation: A Deep Bayesian Optimization Approach. The 35th AAAI Conference on Artificial Intelligence (AAAI-21), 2021. (CCF A)
- [3]. **Jiaxu Cui**, Bo Yang and Xia Hu. Deep Bayesian Optimization on Attributed Graphs. The 33rd AAAI Conference on Artificial Intelligence (AAAI-19), 2019. (CCF A)
- [4]. Jiaxu Cui, Bo Yang, Bingyi Sun, Xia Hu and Jiming Liu. Scalable and Parallel Deep Bayesian Optimization on Attributed Graphs. IEEE Transactions on Neural Networks and Learning Systems (TNNLS), 2022, 33(1): 103 – 116. (Q1, IF 14.3, CCF B)
- [5]. Jiaxu Cui, Qi Tan, Chunxu Zhang, and Bo Yang. A Novel Framework of Graph Bayesian Optimization and Its Applications to Real-World Network Analysis. Expert Systems with Applications (ESWA). 2021, 170, 114524. (Q1, IF 6.954, CCF C)
- [6]. Jiaxu Cui, Bo Yang. Survey on Bayesian Optimization Methodology and Applications (贝叶斯优化方法和 应用综述). Ruan Jian Xue Bao/Journal of Software, 2018,29(10):3068-3090. This survey paper has been awarded as the "High Impact Paper of Journal of Software in 2020".

For more information, please visit: <u>https://csjtx1021.github.io</u>

Services

I have been invited to serve as program committee members or reviewers in the following major academic conferences and journals:

- AAAI Conference on Artificial Intelligence (AAAI) 2022-2023
- International Joint Conference on Artificial Intelligence (IJCAI) 2021-2022
- IEEE Transactions on Neural Networks and Learning Systems (TNNLS) 2020-2021
- IEEE Transactions on Big Data (TBD) 2021
- ACM Transactions on the Web (TWEB) 2022
- Invited as a Guest Editor of "Special Issue on Recent Advances in Graph Learning: Theory, Algorithms, Applications, and Systems" in International Journal of Machine Learning and Cybernetics (IJMLC) 2022