

# Zhibing Zhao

*Ph.D.*

*Data & Applied Scientist at Microsoft*  
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## Research Interests

- Learning to Rank
- Active Learning
- Statistical Inference
- Machine Translation

## Education

- 2015–2020 **Ph.D., Computer Science**, *Rensselaer Polytechnic Institute*, Troy, NY, US.  
2012–2014 **M.S., Electrical Engineering**, *University of Connecticut*, Storrs, CT, US.  
2008–2012 **B.Eng., Electrical Engineering**, *Tsinghua University*, Beijing, China.

## Experience

- 2020–Present **Data & Applied Scientist**, MICROSOFT, Bellevue, WA, US.  
Learning ranking models for information retrieval
- 2015–2020 **Research Assistant**, RENSSELAER POLYTECHNIC INSTITUTE, Troy, NY, US.  
Preference learning and aggregation
- 2019 Summer **Data and Applied Scientist Intern**, MICROSOFT, Bellevue, WA, US.  
Information retrieval.
- 2018 Summer **Research Intern**, MICROSOFT RESEARCH ASIA, Beijing, China.  
*Award of Excellence*  
Topic: neural machine translation.
- 2012–2014 **Research Assistant**, UNIVERSITY OF CONNECTICUT, Storrs, CT, US.
- 2011–2012 **Research Assistant**, TSINGHUA UNIVERSITY, Beijing, China.

## Publications

### Archival Conference Papers

1. **Zhibing Zhao**, Yingce Xia, Tao Qin, Lirong Xia, and Tie-Yan Liu, "Dual Learning: Theoretical Study and an Algorithmic Extension", in *Proceedings of the 12th Asian Conference on Machine Learning (ACML-20)*.
2. **Zhibing Zhao** and Lirong Xia, "Learning Mixtures of Plackett-Luce Models from Structured Partial Orders", in *Proceedings of 33rd Conference on Neural Information Processing Systems (NeurIPS-19)*.
3. Ao Liu, **Zhibing Zhao**, Chao Liao, Pinyan Lu and Lirong Xia, "Learning Plackett-Luce Mixtures from Partial Preferences", in *Proceedings of 33rd AAAI Conference on Artificial Intelligence (AAAI-19)*.

4. Jun Wang, Sujoy Sikdar, Tyler Shepherd, **Zhibing Zhao**, Chunheng Jiang and Lirong Xia, "Practical Algorithms for STV and Ranked Pairs with Parallel Universes Tiebreaking", in *Proceedings of 33rd AAAI Conference on Artificial Intelligence (AAAI-19)*.
5. **Zhibing Zhao** Haoming Li, Junming Wang, Jeffrey Kephart, Nicholas Mattei, Hui Su, and Lirong Xia, "A Cost-Effective Framework for Preference Elicitation and Aggregation", in *Proceedings of the 34th Conference on Uncertainty in Artificial Intelligence (UAI-18)*.
6. **Zhibing Zhao** and Lirong Xia, "Composite Marginal Likelihood Methods for Random Utility Models", in *Proceedings of the 35th International Conference on Machine Learning (ICML-18)*.
7. **Zhibing Zhao**, Tristan Villamil, and Lirong Xia, "Learning Mixtures of Random Utility Models", in *Proceedings of the 32nd AAAI Conference on Artificial Intelligence (AAAI-18)*.
8. **Zhibing Zhao**, Peter Piech, and Lirong Xia, "Learning Mixtures of Plackett-Luce Models", in *Proceedings of the 33rd International Conference on Machine Learning (ICML-16)*.
9. **Zhibing Zhao**, Peng Zhang, Jun-Hong Cui, and Shengli Zhou, "Life-Oriented Control of Tidal Power Generation", *OCEANS*, 2013.
10. **Zhibing Zhao**, Yongdong Li, and Bo Dong, "Modeling and Control Strategy for Cascade Bi-directional DC/DC Converter in Microgrid", *IPEMC*, 2012.
11. Mo Li, Jiansheng Yuan and **Zhibing Zhao**, "Low-Voltage SPD Coordination Analysis", *APL*, 2011.

#### Journal Papers

12. Taofeek Orekan, **Zhibing Zhao**, Peng Zhang, Jian Zhang, Shengli Zhou, and Jun-Hong Cui, "Maximum Lifecycle Tracking for Tidal Energy Generation System", *Electric Power Components and Systems*, 2015.
13. Gengfeng Li, Peng Zhang, Peter B. Luh, Wenyan Li, Zhaohong Bie, Camilo Serna, and **Zhibing Zhao**, "Risk Analysis for Distribution Systems in the Northeast U. S. Under Wind Storms", *IEEE Transactions on Power Systems*, 2014.

#### Presentations

1. "A Cost-Effective Framework for Preference Elicitation and Aggregation", poster at UAI-18 (Monterey, CA, US) and IBM AI Research Week 2019 (MA, US).
2. "Composite Marginal Likelihood Methods for Random Utility Models", oral and poster at ICML-18 (Stockholm, Sweden).
3. "Learning Mixtures of Random Utility Models", poster at AAAI-18 (New Orleans, Louisiana, US) and CAEC-17 (Cambridge, MA, US).

#### Professional Service

Reviewer for ICML-20, NeurIPS-20, PC member for AAAI-19, 20, reviewed papers for AAMAS-18, EC-18, and NeurIPS-18, 19