

# Ziyang Tang

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<b>EDUCATION</b>	<b>University of Texas at Austin</b> , Austin, TX <i>Ph.D</i> , Department of Computer Science	2016.09 – 2023.05
	<b>Cornell University</b> , Ithaca, NY <i>Master of Engineering</i> , Department of Computer Science	2015.09 – 2016.05.29
	<b>Cornell University</b> , Ithaca, NY <i>Exchange Student</i> , Department of Computer Science	2014.09 – 2015.05
	<b>Peking University</b> , Beijing, China <i>Bachelor of Science</i> , School of EECS	2011.09 – 2015.07
<b>RESEARCH &amp; INDUSTRY EXPERIENCE</b>	Applied Scientist, Amazon, Seattle, WA. Research Scientist, Amazon, Seattle, WA. Research Intern, Bytedance, Seattle, WA. Graduate Research Assistant, UT Austin, Austin, TX	2024.01 – Present 2021.09 – 2023.12 2020.06 – 2020.08 2017.09 – 2021.08
<b>PROFESSIONAL ACTIVITY</b>	Conference reviewer/ PC member <ul style="list-style-type: none"><li>• Conference on Neural Information Processing Systems (NeurIPS) 2018 - 2023</li><li>• International Conferences on Machine Learning (ICML) 2019 - 2023</li><li>• International Conferences on Learning Representations (ICLR) 2020 - 2022</li><li>• AAAI Conference on Artificial Intelligence (AAAI) 2020 - 2022</li></ul> Journal Reviewer <ul style="list-style-type: none"><li>• IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)</li><li>• Journal of Machine Learning Research (JMLR)</li><li>• Transactions on Machine Learning Research (TMLR)</li></ul>	
<b>TEACHING EXPERIENCE</b>	Teaching Assistant <ul style="list-style-type: none"><li>• CS391L Machine Learning (web-based), Fall 2020, Spring 2021, UT Austin, Instructor: Adam Klivans &amp; Qiang Liu.</li><li>• CS331 Algorithm and Complexity, Fall 2019, Spring 2019, UT austin, Instructor: Dana Moshkovitz</li><li>• CS331 Algorithm and Complexity, Spring 2020, Fall 2018, 2016, UT austin, Instructor: Fares Fraij</li><li>• CS331 Algorithm and Complexity, Fall 2017, Spring 2017(Honor Track), UT austin, Instructor: Eric Price</li></ul>	
<b>HONOR and AWARD</b>	Honor: <ul style="list-style-type: none"><li>• <b>Dean's Honor List</b> Cornell University</li><li>• <b>Kuang-Hua Scholarship</b>(top 10%) Peking University, 2014.10</li><li>• <b>Robin Li Scholarship</b>(top 5%) Peking University, 2013.10</li><li>• <b>Tian Chuang Scholarship</b>(top 10%) Peking University, 2012.10</li></ul> Award: <ul style="list-style-type: none"><li>• Googl Student Travel Award</li><li>• 2014 Mathematical Contest in Modeling (MCM), <b>Meritorious Winner</b></li></ul>	

- **3<sup>rd</sup> place** in 2015 Peking University AI bot competition (among 125 participants)
- **First prize** in 2008,2009,2010 National Mathematical Contest for High School Students, ranked **17th, 20th, 12th** in Guangdong Province respectively(over 1000 participants).
- **First prize** in 2009 Chinese Hong Kong Mathematical Olympiad(CHKMO). **Second Place** among all participants

## PUBLICATION Pre-print

- **Ziyang Tang**, Yiheng Duan, Stephanie Zhang, and Lihong Li.  
A Reinforcement Learning Approach to Estimating Long-term Treatment Effects. arXiv preprint arXiv:2210.07536 (2022).
- Liu Liu, **Ziyang Tang**, Lanqing Li, Dijun Luo.  
Robust Imitation Learning from Corrupted Demonstrations. arXiv preprint arXiv:2201.12594 (2022).
- Xing han\*, **Ziyang Tang\***, Joydeep Ghosh, Qiang Liu.  
Split Localized Conformal Prediction. arXiv preprint arXiv:2206.13092 (2022).
- **Ziyang Tang**, Yihao Feng, and Qiang Liu.  
Operator Deep Q-Learning: Zero-Shot Reward Transferring in Reinforcement Learning. arXiv preprint arXiv:2201.00236 (2022).

## Refereed Conference Papers

- **Ziyang Tang**, Yiheng Duan, Steven Zhu, Stephanie Zhang, Lihong Li.  
Estimating Long-term Effects from Experimental Data. In Proceedings of the 16th ACM Conference on Recommender Systems, pp. 516-518. 2022.
- Yihao Feng\*, **Ziyang Tang\***, Na Zhang, Qiang Liu.  
Non-asymptotic Confidence Intervals of Off-policy Evaluation: Primal and Dual Bounds. In International Conference on Learning Representations(ICLR). 2021.
- **Ziyang Tang**, Yihao Feng, Na Zhang, Jian Peng, Qiang Liu.  
Off-Policy Interval Estimation with Lipschitz Value Iteration. In Advances in Neural Information Processing Systems(NeurIPS), 2020.
- Yihao Feng\*, Tongzheng Ren\*, **Ziyang Tang\***, Qiang Liu.  
Accountable Off-Policy Evaluation With Kernel Bellman Statistics. In International Conference on Machine Learning(ICML). 2020.
- **Ziyang Tang\***, Yihao Feng\*, Lihong Li, Dengyong Zhou, Qiang Liu.  
Doubly Robust Bias Reduction in Infinite Horizon Off-Policy Estimation. In International Conference on Learning Representations(ICLR). 2020.
- Dilin Wang\*, **Ziyang Tang\***, Chandrajit Bajaj, Qiang Liu.  
Stein Variational Gradient Descent With Matrix-Valued Kernels. In Advances in Neural Information Processing Systems 32, pp. 7836–7846(NeurIPS). 2019.
- Qiang Liu, Lihong Li, **Ziyang Tang**, and Dengyong Zhou.  
Breaking the curse of horizon: Infinite-horizon off-policy estimation. In Advances in Neural Information Processing Systems, pp. 5357-5367(NeurIPS). 2018.
- Chaoyi Wang, Hao Chen, Zihan Lei, **Ziyang Tang**, Tian Liu, and Ke Xu.  
Tree Convex Bipartite Graphs:  $\mathcal{NP}$ -Complete Domination, Hamiltonicity and Treewidth. In International Workshop on Frontiers in Algorithmics, pp. 252-263. Springer, Cham, 2014.

## Journal Papers:

- Hao Chen, Zihan Lei, Tian Liu, **Ziyang Tang**, Chaoyi Wang, and Ke Xu.  
Complexity of domination, hamiltonicity and treewidth for tree convex bipartite graphs. Journal of Combinatorial Optimization 32, no. 1 (2016): 95-110.

**COMPUTER  
SKILLS**

- *Programming language:* Python, C/C++, Matlab, php, java, javascript, pascal
- *Machine Learning Package:* Tensorflow, Pytorch, pandas, Numpy
- *Software:* Github, L<sup>A</sup>T<sub>E</sub>X