Yiheng Lin Email: yihengl@caltech.edu

Department of Computing and Mathematical Sciences, Caltech

EDUCATION

California Institute of Technology (PhD Student)

Major in Computing and Mathematical Sciences.

Pasadena, CA Sep 2020 – Now

Major in Compaining and Mainematical Sciences

Beijing, China

Tsinghua University (Bachelor of Engineering)

Major in Computer Science and Technology (Yao Class).

Aug 2016 - Jun 2020

Honors

- Spotlight presentation at the 39th International Conference on Machine Learning (Baltimore, 2022)
- Spotlight presentation at the 35th Conference on Neural Information Processing Systems (Virtual, 2021);
- Invited presentation at 2021 INFORMS Annual Meeting (Virtual, 2021);
- Invited presentation at 2021 Asilomar Conference on Signals, Systems, and Computers (Virtual, 2021);
- Oral presentation at ACM SIGMETRICS 2020 (Virtual, 2020);
- Kortschak Scholar (Prize fellowship founded by Walter and Marcia Kortschak) (CMS, Caltech, 2020);
- Yao Award, Recognition Prize (Grant named after Prof. Andrew Chi-Chih Yao; About 10 recipients each year) (IIIS, Tsinghua University, 2019);

PUBLICATIONS

- Y. Lin, J. Gan, G. Qu, Y. Kanoria, and A. Wierman, "Decentralized Online Convex Optimization in Networked Systems." In International Conference on Machine Learning (2022).[arXiv]
- W. Pan, G. Shi, Y. Lin, and A. Wierman, "Online Optimization with Feedback Delay and Nonlinear Switching Cost." Proceedings of the ACM on Measurement and Analysis of Computing System 6, 1(2022), 1-34. [arXiv]
- Y. Lin*, Y. Hu*, H. Sun*, G. Shi*, G. Qu*, and A. Wierman, "Perturbation-based Regret Analysis of Predictive Control in Linear Time Varying Systems." Advances in Neural Information Processing Systems 34 (2021). (Spotlight, < 3%).[arXiv]
- Y. Lin, G. Qu, L. Huang, and A. Wierman, "Multi-Agent Reinforcement Learning in Stochastic Networked Systems." Advances in Neural Information Processing Systems 34 (2021). [arXiv]
- G. Qu, Y. Lin, A. Wierman, and N. Li, "Scalable Multi-Agent Reinforcement Learning for Networked Systems with Average Reward." Advances in Neural Information Processing Systems 33 (2020).[arXiv]
- S. Shi*, **Y. Lin***, S. Chung, Y. Yue, and A. Wierman, "Online Optimization with Memory and Competitive Control." Advances in Neural Information Processing Systems 33 (2020).[arXiv]
- Y. Lin, G. Goel, and A. Wierman, "Online Optimization with Predictions and Non-convex Losses." Proceedings of the ACM on Measurement and Analysis of Computing System 4, 1(2020), 18. [arXiv]
- G. Goel*, Y. Lin*, H. Sun*, and A. Wierman, "Beyond Online Balanced Descent: An Optimal Algorithm for Smoothed Online Optimization." Advances in Neural Information Processing Systems 32 (2019). (Spotlight, < 3%).[arXiv]

PREPRINTS

• S. Shin, **Y. Lin**, G. Qu, A. Wierman, and M. Anitescu, "Near-Optimal Distributed Linear-Quadratic Regulator for Networked Systems." arXiv preprint arXiv:2204.05551 (2022).[arXiv]