

Dynamic Assortment Optimization with Changing Contextual Information

Xi Chen, Yining Wang, Yuan Zhou

Journal of Machine Learning Research, 21(216), pp. 1–44 (2020)

Optimal Design of Process Flexibility for General Production Systems

Xi Chen, Tengyu Ma, Jiawei Zhang, Yuan Zhou

Operations Research 67–2, pp. 516–531 (2019)

Optimal Sparse Designs for Process Flexibility via Probabilistic Expanders

Xi Chen, Jiawei Zhang, Yuan Zhou

Operations Research 63–5, pp. 1159–1176 (2015)

Constant Factor Lasserre Gaps for Graph Partitioning Problems

Venkatesan Guruswami, Ali Kemal Sinop, Yuan Zhou

SIAM Journal on Optimization 24–4, pp. 1698–1717 (2014)

SELECTED
CONFERENCE
PUBLICATIONS

Model-Free Reinforcement Learning: from Clipped Pseudo-Regret to Sample Complexity

Zihan Zhang, Yuan Zhou, Xiangyang Ji

ICML 2020, Proceedings of the 38th International Conference on Machine Learning, to appear

Linear Bandits with Limited Adaptivity and Learning Distributional Optimal Design

Yufei Ruan, Jiaqi Yang, Yuan Zhou

STOC 2021, Proceedings of the 53rd Annual ACM Symposium on Theory of Computing, to appear

Almost Optimal Model-Free Reinforcement Learning via Reference-Advantage Decomposition

Zihan Zhang, Yuan Zhou, Xiangyang Ji

NeurIPS 2020, Proceedings of the 34th Conference on Neural Information Processing Systems

Learning Guidance Rewards with Trajectory-space Smoothing

Tanmay Gangwani, Yuan Zhou, Jian Peng

NeurIPS 2020, Proceedings of the 34th Conference on Neural Information Processing Systems

Collaborative Top Distribution Identifications with Limited Interaction

Nikolai Karpov, Qin Zhang, Yuan Zhou

FOCS 2020, Proceedings of the 61st Annual Symposium on Foundations of Computer Science

Multinomial Logit Bandit with Low Switching Cost

Kefan Dong, Yingkai Li, Qin Zhang, Yuan Zhou

ICML 2020, Proceedings of the 37th International Conference on Machine Learning

\sqrt{n} -Regret for Learning in Markov Decision Processes with Function Approximation and Low Bellman Rank

Kefan Dong, Jian Peng, Yining Wang, Yuan Zhou

COLT 2020, Conference on Learning Theory

Exploration via Hindsight Goal Generation

Zhizhou Ren, Kefan Dong, Yuan Zhou, Qiang Liu, Jian Peng

NeurIPS 2019, Proceedings of the 33rd Conference on Neural Information Processing Systems

Thresholding Bandit with Optimal Aggregate Regret

Chao Tao, Saúl Blanco, Jian Peng, Yuan Zhou

NeurIPS 2019, Proceedings of the 33rd Conference on Neural Information Processing Systems

Collaborative Learning with Limited Interaction: Tight Bounds for Distributed Exploration in Multi-Armed Bandits

Chao Tao, Qin Zhang, Yuan Zhou

FOCS 2019, Proceedings of the 60th Annual Symposium on Foundations of Computer Science

Nearly Minimax-Optimal Regret for Linearly Parameterized Bandits

Yingkai Li, Yining Wang, Yuan Zhou

COLT 2019, Conference on Learning Theory

Error Reduction in Off-Policy Evaluation and Learning from Logged Bandit Feedback

Yuan Xie, Boyi Liu, Qiang Liu, Zhaoran Wang, Yuan Zhou, Jian Peng

ICLR 2019, Proceedings of the 7th International Conference on Learning Representations

Near-Optimal Policies for Dynamic Multinomial Logit Assortment Selection Models

Yining Wang, Xi Chen, Yuan Zhou

NeurIPS 2018, Proceedings of the 32nd Conference on Neural Information Processing Systems

Tight Bounds for Collaborative PAC Learning via Multiplicative Weights

Jiecao Chen, Qin Zhang, Yuan Zhou

NeurIPS 2018, Proceedings of the 32nd Conference on Neural Information Processing Systems

Best Arm Identification in Linear Bandits with Linear Dimension Dependency

Chao Tao, Saúl Blanco Yuan Zhou

ICML 2018, Proceedings of the 35th International Conference on Machine Learning

Adaptive Multiple-Arm Identification

Jiecao Chen, Xi Chen, Qin Zhang, Yuan Zhou

ICML 2017, Proceedings of the 34th International Conference on Machine Learning

Parameterized Algorithms for Constraint Satisfaction Problems Above Average with Global Cardinality Constraints

Xue Chen, Yuan Zhou

SODA 2017, Proceedings of the 28th annual ACM-SIAM Symposium on Discrete Algorithms

Satisfiability of Ordering CSPs Above Average Is Fixed-Parameter Tractable

Konstantin Makarychev, Yury Makarychev, Yuan Zhou

FOCS 2015, Proceedings of the 56th Annual Symposium on Foundations of Computer Science

Optimal PAC Multiple Arm Identification with Applications to Crowdsourcing

Yuan Zhou, Xi Chen, Jian Li

ICML 2014, the 31st International Conference on Machine Learning

Hardness of Robust Graph Isomorphism, Lasserre Gaps, and Asymmetry of Random Graphs

Ryan O'Donnell, John Wright, Chenggang Wu, Yuan Zhou

SODA 2014, Proceedings of the 25th annual ACM-SIAM Symposium on Discrete Algorithms

Hypercontractive inequalities via SOS, with an application to Vertex-Cover

Manuel Kauers, Ryan O'Donnell, Li-Yang Tan, Yuan Zhou

SODA 2014, Proceedings of the 25th annual ACM-SIAM Symposium on Discrete Algorithms

Approximability and proof complexity

Ryan O'Donnell, Yuan Zhou

SODA 2013, Proceedings of the 24th annual ACM-SIAM Symposium on Discrete Algorithms

Hypercontractivity, Sum-of-Squares Proofs, and their Applications

Boaz Barak, Fernando Brandão, Aram Harrow, Jonathan Kelner, David Steurer, Yuan Zhou
STOC 2012, Proceedings of the 44th annual ACM Symposium on Theory of Computing Conference

Invited to *SIAM Journal on Computing*

Polynomial integrality gaps for strong SDP relaxations of Densest k -Subgraph

Aditya Bhaskara, Moses Charikar, Venkatesan Guruswami, Aravindan Vijayaraghavan, Yuan Zhou

SODA 2012, Proceedings of the 23th annual ACM-SIAM Symposium on Discrete Algorithms

Approximation Algorithms and Hardness of the k -Route Cut Problem

Julia Chuzhoy, Yury Makarychev, Aravindan Vijayaraghavan, Yuan Zhou

SODA 2012, Proceedings of the 23th annual ACM-SIAM Symposium on Discrete Algorithms
ACM Transactions on Algorithms 12(1), Article 2 (February 2016)

Tight Inapproximability Bounds for Almost-satisfiable Horn SAT and Exact Hitting Set

Venkatesan Guruswami, Yuan Zhou

SODA 2011, Proceedings of the 22th annual ACM-SIAM Symposium on Discrete Algorithms
Theory of Computing 8, pp. 239–267 (2012)

Tight Regret Bounds for Infinite-armed Linear Contextual Bandits

Yingkai Li, Yining Wang, Xi Chen, Yuan Zhou

AISTATS 2021, Proceedings of the 24th International Conference on Artificial Intelligence and Statistics

Near-Optimal MNL Bandits Under Risk Criteria

Guangyu Xi, Chao Tao, Yuan Zhou

AAAI 2021, Proceedings of the 35th AAAI Conference on Artificial Intelligence

Harnessing Distribution Ratio Estimators for Learning Agents with Quality and Diversity

Tanmay Gangwani, Jian Peng, Yuan Zhou

CoRL 2020, Conference on Robot Learning

Learning Structural Genetic Information via Graph Neural Encoding

Yuan Xie, Yulong Pei, Yun Lu, Haixu Tang, Yuan Zhou

ISBRA 2020, Proceedings of the 16th International Symposium on Bioinformatics Research and Applications

A PTAS for the Bayesian Thresholding Bandit Problem

Yue Qin, Jian Peng, Yuan Zhou

AISTATS 2020, Proceedings of the 23rd International Conference on Artificial Intelligence and Statistics

Adaptive Double Exploration Tradeoff for Outlier Detection

Xiaojin Zhang, Honglei Zhuang, Shengyu Zhang, Yuan Zhou

AAAI 2020, Proceedings of the 34th AAAI Conference on Artificial Intelligence

On Asymptotically Tight Tail Bounds for Sums of Geometric and Exponential Random Variables

Yaonan Jin, Yingkai Li, Yining Wang, Yuan Zhou

Manuscript, 2019

Optimal strong parallel repetition for projection games on low threshold rank graphs

Madhur Tulsiani, John Wright, Yuan Zhou

ICALP 2014, Proceedings of the 41st International Colloquium on Automata, Languages and

ADDITIONAL
MANUSCRIPTS AND
PUBLICATIONS

Programming

The Fourier Entropy-Influence Conjecture for certain classes of Boolean functions

Ryan O'Donnell, John Wright, Yuan Zhou

ICALP 2011, Proceedings of the 38th International Colloquium on Automata, Languages and Programming

Hardness of Max-2Lin and Max-3Lin over integers, reals, and large cyclic groups

Ryan O'Donnell, Yi Wu, Yuan Zhou

*CCC 2011, Proceedings of the 26th annual IEEE Conference on Computational Complexity
ACM Transactions on Computation Theory 7(2), Article 9 (May 2015)*

Locally Testable Codes and Cayley Graphs

Parikshit Gopalan, Salil Vadhan, Yuan Zhou

ITCS 2014, Proceedings of the 5th Innovations in Theoretical Computer Science conference

Approximation Schemes via Sherali-Adams Hierarchy for Dense Constraint Satisfaction Problems and Assignment Problems

Yuichi Yoshida, Yuan Zhou

ITCS 2014, Proceedings of the 5th Innovations in Theoretical Computer Science conference

Linear programming, width-1 CSPs, and robust satisfaction

Gabor Kun, Ryan O'Donnell, Suguru Tamaki, Yuichi Yoshida, Yuan Zhou

ITCS 2012, Proceedings of the 3rd Innovations in Theoretical Computer Science conference

Finding almost-perfect graph bisections

Venkatesan Guruswami, Yury Makarychev, Prasad Raghavendra, David Steurer, Yuan Zhou

ITCS 2011, Proceedings of the 2nd Innovations in Theoretical Computer Science conference

Optimal lower bounds for locality sensitive hashing (except when q is tiny)

Ryan O'Donnell, Yi Wu, Yuan Zhou

*ITCS 2011, Proceedings of the 2nd Innovations in Theoretical Computer Science conference
ACM Transactions on Computation Theory 6(1), Article 5 (March 2014)*

Deterministic Coupon Collection and Better Strong Dispersers

Raghu Meka, Omer Reingold, Yuan Zhou

RANDOM 2014, the 18th International Workshop on Randomization and Computation

Approximating bounded occurrence ordering CSPs

Venkatesan Guruswami, Yuan Zhou

APPROX 2012, Proceedings of the 15th International Workshop on Approximation, Randomization, and Combinatorial Optimization

Black-box reduction in mechanism design

Zhiyi Huang, Lei Wang, Yuan Zhou

APPROX 2011, Proceedings of the 14th International Workshop on Approximation, Randomization, and Combinatorial Optimization

Surviving Rates of Graphs with Bounded Treewidth for the Firefighter Problem

Leizhen Cai, Yongxi Cheng, Elad Verbin, Yuan Zhou

SIAM Journal on Discrete Mathematics 24(4), pp. 1322–1335 (2010)

Tighter Bounds for Facility Games

Pinyan Lu, Yajun Wang, Yuan Zhou

WINE 2009, Proceedings of the 5th International Workshop on Internet and Network Economics

On the α -Sensitivity of Nash Equilibria in PageRank-Based Network Reputation

Games

Wei Chen, Shang-Hua Teng, Yajun Wang, Yuan Zhou
FAW 2009, Proceedings of the 3rd International Workshop on Frontiers in Algorithmics
Invited to *Theoretical Computer Science*

TEACHING

CSCI B503 Algorithm Design and Analysis IU-Bloomington, Fall 2018
Course evaluation: 100% of the students rate the quality of this class as outstanding.

CSCI B490 Competitive Programming IU-Bloomington, Fall 2018

CSCI B503 Algorithm Design and Analysis IU-Bloomington, Fall 2017
Course evaluation: 91% of the students rate the quality of this class as outstanding.

CSCI B490 Competitive Programming IU-Bloomington, Fall 2017

CSCI B503 Algorithm Design and Analysis IU-Bloomington, Spring 2017
Course evaluation: 60% of the students rate the quality of this class as outstanding.

CSCI B609 A Theorist's Toolkit IU-Bloomington, Fall 2016
Course evaluation: 100% of the students rate the quality of this class as outstanding.

18.434 Undergraduate Seminar in Theoretical Computer Science MIT, Spring 2016
Course evaluation: 6.8/7.0

6.006 Introduction to Algorithms MIT, Spring 2015
Course evaluation: 4.9/7.0

Coach and Science Committee Member of Chinese Olympiad in Informatics
2005, 2006, 2007

SELECTED AWARDS AND HONORS

National Science Foundation, Regular Grant (Small), 2020

JPMorgan Chase AI Research Faculty Research Award, 2020

Invited young researcher at the 1st Heidelberg Laureate Forum, 2013

Simons Graduate Fellowship in Theoretical Computer Science, 2012

ACM International Collegiate Programming Contest, World Finals, KTH(Royal Institute of Technology, Sweden), 2nd Place, 2009

National Scholarship, 1st Prize. Offered by the Chinese Ministry of Education, Tsinghua University, 2007 and 2008

Tsinghua-Samsung Scholarship, 1st Prize, 2006

International Olympiad in Informatics, Poland, Gold Medal (1st Place and full mark), 2005

PROFESSIONAL SERVICES

Program committee member for the following conferences
– ITCS 2018, Innovations in Theoretical Computer Science conference

Reviewer for the following journals
– SIAM Journal on Computing
– Theory of Computing
– Algorithmica

- INFORMS Journal on Computing
- Theoretical Computer Science
- Management Science
- Operations Research Letters
- Journal of Computer Science and Technology

Reviewer for the following conferences

- STOC, ACM Symposium on Theory of Computing
- FOCS, IEEE Symposium on Foundations of Computer Science
- SODA, SIAM-ACM Symposium on Discrete Algorithms
- CCC, IEEE Conference on Computational Complexity
- ICALP, International Colloquium on Automata, Languages, and Programming
- ITCS, Innovations in Theoretical Computer Science conference
- ESA, European Symposium on Algorithms
- APPROX/RANDOM, International Workshop on Approximation, Randomization, and Combinatorial Optimization
- FSTTCS, Conference on Foundations of Software Technology and Theoretical Computer Science
- STACS, International Symposium on Theoretical Aspects of Computer Science
- ISAAC, International Symposium on Algorithms and Computation
- FAW, International Workshop on Frontiers in Algorithmics
- CATS, Computing: the Australasian Theory Symposium

Reviewer for the following grant agencies

- The Research Grants Council, Hong Kong

REFERENCES

Available upon request