

## Minghua Chen

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POSITIONS HELD	2020 - present, Assistant Director, Hong Kong Institute for Data Science 2019 - present, Professor, School of Data Science, City University of Hong Kong 2013 - 2019, Associate Professor, Information Engineering, The Chinese University of Hong Kong 2007 - 2013, Assistant Professor, Information Engineering, The Chinese University of Hong Kong 2015 - 2019, Adjunct Associate Professor, Tsinghua University, China 2006 - 2007, PostDoc Researcher, Microsoft Research at Redmond, USA	
EDUCATION	Ph.D. (2006), Electrical Engineering and Computer Sciences, University of California at Berkeley B.E. (1999), M.S. (2001), Electronic Engineering, Tsinghua University, Beijing, China	
SELECTED AWARDS AND RECOGNITION	Election to IEEE Fellow, 2021 IEEE INFOCOM Best Poster Award, 2021 ACM Distinguished Scientist/Member, 2020 ACM e-Energy Best Paper Award Candidate/Finalist (2015, 2016, 2018, 2019, 2022) ACM MobiHoc Best Paper Award Candidate (top 3), 2014 The Chinese University of Hong Kong: Young Researcher Award, 2013 ACM Multimedia 2012 Best Paper Award, 2012 IEEE Transactions on Multimedia Prize Paper Award (Best Paper Award), 2009 IEEE International Conference on Multimedia and Expo (ICME) Best Paper Award, 2009 University of California at Berkeley: Eli Jury Thesis Award, 2007	
SELECTED PUBLICATION	T. Zhao, X. Pan, M. Chen, and S. H. Low, "Ensuring DNN Solution Feasibility for Optimization Problems with Linear Constraints", in Proceedings of 11th International Conference on Learning Representations (ICLR), Kigali, Rwanda, May 1-5, 2023.  M. Zhou, M. Chen, and S. H. Low, "DeepOPF-FT: One Deep Neural Network for Multiple AC-OPF Problems with Flexible Topology", IEEE Transactions on Power Systems, accepted for publication.  W. Xu, Q. Liu, M. Chen, and H. Zeng, "Ride the Tide of Traffic Conditions: Opportunistic Driving Improves Energy Efficiency of Long-Haul Timely Truck Transportation", IEEE Transactions on Intelligent Transportation Systems, accepted for publication. (Conference version in ACM BuildSys 2019).  W. Xu*, T. Cui*, and M. Chen, "Optimizing Two-Truck Platooning with Deadlines", IEEE Transactions on Intelligent Transportation Systems, accepted for publication. (*: Co-primary authors.)  X. Pan, M. Chen, T. Zhao, and S. H. Low, "DeepOPF: A Feasibility-Optimized Deep Neural Network Approach for AC Optimal Power Flow Problems", IEEE Systems Journal, accepted, 2022.  Q. Lin, Y. Mo, J. Su, and M. Chen, "Competitive Online Optimization with Multiple Inventories: A Divide-and-Conquer Approach", in Proceedings of ACM SIGMETRICS / IFIP Performance,	

Mumbai, India, June 6-10, 2022.

T. Zhao, H. Yi, M. Chen, C. Wu, and Y. Xu, “Efficient and Robust Equilibrium Strategies of Utilities in Day-ahead Market with Load Uncertainty”, IEEE Systems Journal, accepted, 2021.

W. Huang, X. Pan, M. Chen, and S. H. Low, “DeepOPF-V: Solving AC-OPF Problems Efficiently”, IEEE Transactions on Power Systems, vol. 37, no. 1, pp. 800 - 803, Jan. 2022.

X. Pan, T. Zhao, M. Chen, and S. Zhang, “DeepOPF: A Deep Neural Network Approach for Security-Constrained DC Optimal Power Flow”, IEEE Transactions on Power Systems, vol. 36, issue 3, pp. 1725 - 1735, May 2021. (Conference version in IEEE SmartGridComm 2019.)

W. Xu, Q. Liu, M. Chen, and H. Zeng, “Ride the Tide of Traffic Conditions: Opportunistic Driving Improves Energy Efficiency of Long-Haul Timely Truck Transportation”, in Proceedings of ACM BuildSys, New York, NY, USA, November 13-14, 2019.

Q. Lin, W. Xu, M. Chen, and X. Lin, “A Probabilistic Approach for Demand-Aware Ride-Sharing Optimization”, in Proceedings of ACM MobiHoc, Catania, Italy, July 2-5, 2019.

Q. Lin, H. Yi, J. Pang, M. Chen, A. Wierman, M. Honig, and Y. Xiao, “Competitive Online Optimization under Inventory Constraints”, in Proceedings of ACM SIGMETRICS / IFIP Performance, Phoenix, Arizona, June 24 - 28, 2019. (The first two authors contribute equally to the work.)

H. Yi, M. Hajiesmaili, Y. Zhang, M. Chen, and X. Lin, “Impact of Uncertainty of Distributed Renewable Generation on Deregulated Electricity Supply Chain”, IEEE Transactions on Smart Grid, vol. 9, issue 6, November 2018.

Y. Zhang, L. Deng, M. Chen, and P. Wang, “Joint Bidding and Geographical Load Balancing for Datacenters: Is Uncertainty a Blessing or a Curse?”, IEEE/ACM Transactions on Networking, vol. 26, issue 3, June 2018. (Conference version in IEEE INFOCOM 2017.)

Q. Liu, H. Zeng, and M. Chen, “Energy-Efficient Timely Truck Transportation for Geographically-Dispersed Tasks”, accepted for publication in IEEE Trans. on Intelligent Transportation Systems. (Conference version in ACM e-Energy 2018 as a Best Paper Award Finalist.)

Q. Lin, L. Deng, J. Sun, and M. Chen, “Optimal Demand-Aware Ride-Sharing Routing”, in Proceedings of IEEE INFOCOM, Honolulu, HI, USA, April 16-19, 2018.

L. Deng, M. Hajiesmaili, M. Chen, and H. Zeng, “Energy-Efficient Timely Transportation of Long-Haul Heavy-Duty Trucks”, IEEE Trans. on Intelligent Transportation Systems, vol 19, issue 7, July 2018. (Conference version in ACM e-Energy 2016 as a Best Paper Award Candidate.)

L. Deng, C. Wang, M. Chen, and S. Zhao, “Timely Wireless Flows with Arbitrary Traffic Patterns: Capacity Region and Scheduling Algorithms”, IEEE/ACM Trans. on Networking, vol. 25, no. 6, pp. 3473-3486, December 2017. (Conference version in IEEE INFOCOM 2016.)

S. Zhang, L. Huang, M. Chen, and X. Liu, “Proactive Serving Decreases User Delay Exponentially: The Light-tailed Service Time Case”, IEEE/ACM Trans. on Networking, vol. 25, no. 2, pp. 708 - 723, April 2017. (Conference versions in ACM SIGMETRICS 2014 and ACM MAMA 2015.)

C. Wang and M. Chen, “Sending Perishable Information: Coding Improves Delay-Constrained Throughput Even for Single Unicast”, IEEE Trans. on Information Theory, vol. 63, no. 1, pp. 252 - 279, January 2017. (Conference version in IEEE ISIT 2014.)

H. Hou, K. W. Shum, M. Chen, and H. Li, “BASIC Codes: Low-Complexity Regenerating Codes for Distributed Storage Systems”, IEEE Transactions on Information Theory, vol. 62, issue 6, pp. 3053 - 3069, June 2016. (Conference version in IEEE ISIT 2013.)

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- C. Dong, H. Zeng, and M. Chen, "Online Algorithms for Automotive Idling Reduction with Effective Statistics", IEEE Trans. on Computer-Aided Design of Integrated Circuits and Systems, vol. 34, no. 11, August 2015. (Conference version in ACM/IEEE DAC 2014.)
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- X. Chen, M. Chen, B. Li, Y. Zhao, Y. Wu, and J. Li, "Celerity: A Low Delay Multiparty Conferencing Solution", IEEE Journal on Selected Areas in Communications, Special Issue on Emerging Technologies in Communications, vol. 31, no. 9, Sept. 2013. (Conference version in ACM Multimedia 2011.)
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