Professor Qinglai Wei

Department of Engineering Science, Faculty of Innovation Engineering
Macau University of Science and Technology

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Academic Qualification:

Ph.D., Control Theory and Control Engineering, 2009, Advisor: Prof. Huaguang Zhang
Northeastern University, Shenyang, Liaoning, China

M.S., Control Theory and Control Engineering, 2005, Advisor: Prof. Xianwen Gao
Northeastern University, Shenyang, Liaoning, China

B.S., Automation, 2002, Advisor: Baodong Xu
Northeastern University, Shenyang, Liaoning, China

Teaching Area

Optimal Control, Intelligent Control, Self-Learning Control

Research Area

Learning Control and Systems, Control Science and Control Engineering, Artificial Intelligence

Working Experience

2020/11–present Professor
Macau Institute of Systems Engineering, Macau University of Science and Technology

2018/3–present Associate Director
The State Key Laboratory of Management and Control for Complex Systems, Institute of Automation, Chinese Academy of Sciences

2016/10–present Professor
The State Key Laboratory of Management and Control for Complex Systems, Institute of Automation, Chinese Academy of Sciences

2014/1–2014/2 Visiting Scholar

	University of Texas at Arlington, USA. UTA Research Institute. Visit Prof. Frank L. Lewis
2012/10–2016/9	Associate Professor The State Key Laboratory of Management and Control for Complex Systems, Institute of Automation, Chinese Academy of Sciences
2011/7–2012/9	Assistant Professor The State Key Laboratory of Management and Control for Complex Systems, Institute of Automation, Chinese Academy of Sciences
2009/2–2011/6	Postdoctoral Fellow The State Key Laboratory of Management and Control for Complex Systems, Institute of Automation, Chinese Academy of Sciences

Research Grants

- 9/1/2022–12/31/2025: PI, “Integrated Modeling and Self-Optimal Control of Incomplete Information for Building and Distributed Energy Systems,” Science and Technology Development Fund (FDCT), Macao Funding Scheme for Key R&D Projects, FDCT-22-009-MISE, 2,221,000 MOP
- 7/1/2020–12/31/2024: PI, “Self-Learning Optimization Control of Urban Energy Management System Based on Edge Computing,” National Key Research and Development Plan "Strategic Science and Technology Innovation Cooperation" Key Special Project, 3,000,000 CNY.
- 1/1/2021–12/31/2022: PI, “Two-Person Zero-Sum Game Theory Based on Virtual-Real Interaction,” Chinese Academy of Sciences Guidance Sub-Project (A Class) , 3,600,000CNY.
- 1/1/2021–12/31/2024: PI, “Multi-Level Self-Learning Collaborative Optimal Control of Smart Coal-Fired Power Generation Systems,” National Natural Science Foundation of China (62073321), 590,000 CNY.
- 12/1/2021–12/31/2022: PI, “Development of Self-Tuning Software for Power Generation Process Control Parameters Based on Self-Learning Optimization Algorithm,” North China Electric Power Research Institute Project, 475,000CNY.
- 7/1/2020–12/1/2020: PI, “2020 Summer School on AI and CI Technologies for Industry,” 2020 IEEE Computational Intelligence Society Fund, 5000$.
- 1/1/2020–12/31/2024: PI, “Adaptation and Innovation Properties of Complex Systems”, Pre-Research Project Chinese Academy of Sciences, 5,000,000 CNY.
- 9/1/17 – 12/31/17: PI, China Association for Science and Technology Foundation for the International Organization Affairs, 20,000 CNY.
- 12/1/17–12/1/2018: PI, “Data-Based Iterative Adaptive Dynamic programming for Nonlinear Systems”, China Scholarship Council (CSC) Foundation (201704910282), 21,600 Dollars.
- 1/1/18–12/31/20: PI, “Self-Learning Optimal Control,” The National Science Fund for Outstanding Young Scholars (61722312), 1,300,000 CNY.
- 1/1/17–12/31/17: PI, “The 24th International Conference on Neural Information Processing,”

International Conference Support Foundation of Chinese Academy of Sciences (Y7S5031F31), 250,000 CNY.

- 1/1/14–12/31/17: PI, "Data-Driven Self-Learning Optimal Control for Complex Nonlinear Systems," National Natural Science Foundation of China (61374105), 800,000 CNY.
- 1/1/10–12/31/12: PI, "Nonlinear Differential Games Based on Adaptive Dynamic Programming," National Natural Science Foundation of China (60904037), 190,000 CNY.
- 1/1/13 – 6/30/15: PI, "Data-Based Iterative Dynamic Programming Optimal Control for Complex Nonlinear Systems," Beijing Natural Science Foundation (4132078), 140,000 CNY.
- 7/1/11 – 7/1/12: PI, "Optimal Control for Time-Delay Nonlinear Systems Based on Adaptive Dynamic Programming," China Postdoctoral Science Foundation (201104162), 140,000 CNY.
- 1/1/15 – 12/31/17: PI, "Shuang-Chuang Talent Foundation of Jiangsu," Jiangsu Province China, 500,000 CNY.
- 1/1/13 – 12/31/15: PI, "Huai-Shang Talent Foundation of Huai'an," Jiangsu Province China, 300,000 CNY.
- 1/1/12 – 12/31/13: PI, "Theory and Applications of Adaptive Dynamic Programming for Nonlinear Systems," Outstanding Youth Scholar Foundation of The State Key Laboratory of Management and Control for Complex Systems, Institute of Automation, Chinese Academy of Sciences, 60,000 CNY.
- 1/1/16–12/1/16: PI, "Data-Based Self-Learning Optimal Control for Nonlinear Systems Via Adaptive Dynamic Programming," Special Research Foundation of The State Key Laboratory of Management and Control for Complex Systems, Institute of Automation, Chinese Academy of Sciences, 440,000 CNY.
- 1/1/14 – 12/31/14: PI, "Research of the Analysis Tool Box for Building Energy Consumptions," Qinhuangdao Zhong Ke Bai Jie Electronic Information Technology Co., 150,000 CNY.
- 12/1/15–12/1/16: PI, "Research of the System for Energy Consumption Data Analysis Report," Qinhuangdao Zhong Ke Bai Jie Electronic Information Technology Co., 500,000 CNY.

Representative publications (Complete publication refer to my webpage)

1. 专著

[1] **魏庆来**, 王飞跃(著). *强化学习*. 北京: 清华大学出版社, 2021. ISBN: 978-7-30-288181-2

[2] 刘禹，**魏庆来**(编著). *人工智能与人机博弈*. 北京: 清华大学出版社, 2020. ISBN: 978-7-302-54990-1

[3] **Qinglai Wei**, Ruizhuo Song, Benkai Li, Xiaofeng Lin, *Self-Learning Optimal Control of Nonlinear Systems: Adaptive Dynamic Programming Approach*. Berlin: Springer, 2018. ISBN: 978-981-10-4079-5

[4] **Qinglai Wei**, Ruizhuo Song, and Qiuye Sun, *Iterative Dynamic Programming Theory and Application*. Beijing: Science Press, 2015. ISBN: 978-7-03-042869-1 (in Chinese)
魏庆来，宋睿卓，孙秋野，*迭代自适应动态规划理论及应用*。科学出版社，2015。ISBN: 978-7-03-042869-1

[5] Derong Liu, **Qinglai Wei**, Ding Wang, Xiong Yang, and Hongliang Li, *Adaptive Dynamic Programming with Applications in Optimal Control*. Berlin: Springer, 2016. ISBN: 978-3-319-50813-9

[6] Ruizhuo Song, **Qinglai Wei**, Qing Li, *Adaptive Dynamic Programming: Single and Multiple Controllers*. Berlin: Springer, 2019. ISBN: 978-981-13-1711-8

2. 编著

[1] Fengyu Cong, Andrew Leung, and **Qinglai Wei** (Eds.), *Advances in Neural Networks- ISNN2017 (Lecture Notes in Computer Science 10261)*. Berlin: Springer, 2016. ISBN: 978-3-319-59071-4

3. 代表性论文（第一作者论文列表）

[1] **Qinglai Wei,** Hongyang Li, Tao Li, and Fei-Yue Wang, "A novel data-based fault-tolerant control method for multicontroller linear systems via distributed policy iteration," *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, accept, 2022.

[2] **Qinglai Wei,** Yutian Yan, Jie Zhang, Jun Xiao, and Cong Wang, "A self-attention based deep reinforcement learning approach for AGV dispatching systems," *IEEE Transactions on Neural Networks and Learning Systems*, accept, 2022.

[3] **Qinglai Wei**, Zesheng Yang, Huaizhong Su, Lijian Wang, "Online adaptive dynamic programming for optimal self-learning control of VTOL aircraft systems with disturbances" *IEEE Transactions on Automation Science and Engineering*, accept, 2022.

[4] **Qinglai Wei**, Zesheng Yang, Huaizhong Su, and Lijian Wang, "Monte Carlo-based reinforcement learning control for unmanned aerial vehicle systems," *Neurocomputing*, accept, 2022.

[5] **Qinglai Wei**, Xin Wang, Gang Xiong, Yu Liu. "Data-driven adaptive-critic optimal output regulation towards water level control of boiler-turbine systems." *Expert Systems with Applications,* vol. 207, pp. 117883, 2022. DoI: 10.1016/j.eswa.2022.117883

[6] **Qinglai Wei**, Yugu Li, Jie Zhang, and Fei-Yue Wang, "VGN: Value decomposition with graph attention network for multi-agent reinforcement learning," *IEEE Transactions on Neural Networks and Learning Systems*, accept, 2022. DOI: 10.1109/TNNLS.2022.3172572

[7] **Qinglai Wei**, Hongyang Li, and Fei-Yue Wang, "A novel parallel control method for continuous-time linear output regulation with disturbances," *IEEE Transactions on Cybernetics*, accept, 2021. DOI: 10.1109/TCYB.2021.3128231

[8] **Qinglai Wei**, Jingwei Lu, Tianmin Zhou, Xiang Cheng, and Fei-Yue Wang, "Event-triggered near-optimal control of discrete-time constrained nonlinear systems with application to a boiler-turbine system," *IEEE Transactions on Industrial Informatics*, accept, 2021. DOI: 10.1109/TII.2021.3116084

[9] **Qinglai Wei**, Yujia Liu, Jingwei Lu, Jun Ling, Zhenhua Luan, and Mingliang Chen, "A new integral critic learning for optimal tracking control with applications to boiler-turbine systems," *Optimal Control, Applications and Methods*, accept, 2021.

[10] **Qinglai Wei**, Liao Zhu, Tao Li, and Derong Liu, "A new approach to finite-horizon optimal control for discrete-time affine nonlinear systems via a pseudo-linear method," *IEEE Transactions on Automatic Control*, vol. 67, no. 5, pp. 2610–2617, May 2022.

[11] **Qinglai Wei**, Liyuan Han, and Tielin Zhang, "Spiking adaptive dynamic programming based on poisson process for discrete-time nonlinear systems," *IEEE Transactions on Neural Networks and Learning Systems*, vol. 33, no. 5, pp. 1846–1856, May 2022.

[12] **Qinglai Wei,** Zehua Liao, and Guang Shi, "Generalized actor-critic learning optimal control in smart home energy management," *IEEE Transactions on Industrial Informatics*, vol. 17, no. 10, pp. 6641–6623, Oct. 2021.

[13] **Qinglai Wei**, Liao Zhu, Ruizhuo Song, Pinjia Zhang, Derong Liu, and Jun Xiao, "Model-free adaptive optimal control for unknown nonlinear multiplayer nonzero-sum game/," *IEEE Transactions on Neural Networks and Learning Systems*, vol. 33, no. 2, pp. 879–891, Feb. 2022.

[14] **Qinglai Wei**, Tao Li, and Derong Liu, "Learning control for air conditioning systems via human expressions," *IEEE Transactions on Industrial Electronics*, vol. 68, no. 8, pp. 7662–7671, Aug. 2021.

[15] **Qinglai Wei**, Lingxiao Wang, Jingwei Lu, and Fei-Yue Wang, "Discrete-time self-learning parallel control," *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, vol. 52, no. 1, pp. 192–204, Jan. 2022.

[16] **Qinglai Wei**, Hongyang Li, Xiong Yang, and Haibo He, "Continuous-time distributed policy

iteration for multicontroller nonlinear systems," *IEEE Transactions on Cybernetics*, vol. 51, no. 5, pp. 2372–2383, May 2021.

[17] **Qinglai Wei,** Xin Wang, Xiangnan Zhong, and Naiqi Wu, "Consensus control of leader-following multi-agent systems in directed topology with heterogeneous disturbances," *IEEE/CAA Journal of Automatica Sinica*, vol. 8, no. 2, pp. 423–431, Feb. 2021.

[18] **Qinglai Wei**, Zehua Liao, Ruizhuo Song, Pinjia Zhang, Zhuo Wang, and Jun Xiao, "Self-learning optimal control for ice storage air conditioning systems via data-based adaptive dynamic programming," *IEEE Transactions on Industrial Electronics*, vol. 68, no. 4, pp. 3599–3608, Apr. 2021.

[19] **Qinglai, Wei**, Lingxiao Wang, Yu Liu, and Marios M. Polycarpou, "Optimal elevator group control via deep asynchronous actor-critic learning," *IEEE Transactions on Neural Networks and Learning Systems*, vol. 31, no. 12, pp. 5245–5256, 2020.

[20] **Qinglai Wei**, Hongyang Li, and Fei-Yue Wang, "Parallel control for continuous-time linear systems: A case study," *IEEE/CAA Journal of Automatica Sinica*, vol. 7, no.4, pp. 919–926, July 2020.

[21] **Qinglai Wei**, Zehua Liao, Zhanyu Yang, Benkai Li, and Derong Liu, "Continuous-time time-varying policy iteration," *IEEE Transactions on Cybernetics*, vol. 50, no. 12, pp. 4958–4971, Dec. 2020.

[22] **Qinglai Wei**, Ruizhuo Song, Zehua Liao, Benkai Li, and Frank L. Lewis, "Discrete-time impulsive adaptive dynamic programming," *IEEE Transactions on Cybernetics*, vol. 50, no. 10, pp. 4293–4306, Oct. 2020. (SCI)

[23] **Qinglai Wei**, Derong Liu, and Hanquan Lin, "Value iteration adaptive dynamic programming for optimal control of discrete-time nonlinear systems," *IEEE Transactions on Cybernetics*, vol. 46, no. 3, pp. 840–853, Mar. 2016. (SCI)

[24] **Qinglai Wei**, Ruizhuo Song, and Pengfei Yan, "Data-driven zero-sum neuro-optimal control for a class of continuous-time unknown nonlinear systems with disturbance using ADP," *IEEE Transactions on Neural Networks and Learning Systems*, vol. 27, no. 2, pp. 444–458, Feb. 2016. (SCI)

[25] **Qinglai Wei,** Derong Liu, and Xiong Yang, "Infinite horizon self-learning optimal control of nonaffine discrete-time nonlinear systems," *IEEE Transactions on Neural Networks and Learning Systems*, vol. 26, no. 4, pp. 866–879, Apr. 2015. (SCI)

[26] **Qinglai Wei**, Derong Liu, and Guang Shi, "A novel dual iterative Q-learning method for optimal battery management in smart residential environments," *IEEE Transactions on Industrial Electronics*, vol. 62, no. 4, pp. 2509–2518, Apr. 2015. (SCI)

[27] **Qinglai Wei,** Feiyue Wang, Derong Liu, and Xiong Yang, "Finite-approximation-error based discrete-time iterative adaptive dynamic programming," *IEEE Transactions on Cybernetics*, vol. 44, no. 12, pp. 2820–2833, Dec. 2014. (SCI)

[28] **Qinglai Wei**, Frank L. Lewis, Guang Shi, and Ruizhuo Song, "Error-tolerant iterative adaptive dynamic programming for optimal renewable home energy scheduling and battery management," *IEEE Transactions on Industrial Electronics*, vol. 64, no. 12, pp. 9527–9537, 2017. (SCI)

[29] **Qinglai Wei**, Derong Liu, Frank L. Lewis, Yu Liu, and Jie Zhang, "Mixed iterative adaptive dynamic programming for optimal battery energy control in smart residential microgrids," *IEEE Transactions on Industrial Electronics*, vol. 64, no. 5, pp. 4110–4120, May 2017. (SCI)

[30] **Qinglai Wei**, Guang Shi, Ruizhuo Song, and Yu Liu, "Adaptive dynamic programming-based optimal control scheme for energy storage systems with solar renewable energy," *IEEE Transactions on Industrial Electronics*, vol. 64, no. 7, pp. 5468–5478, Jul. 2017. (SCI)

[31] **Qinglai Wei** and Derong Liu, "Data-driven neuro-optimal temperature control of water gas shift reaction using stable iterative adaptive dynamic programming," *IEEE Transactions on Industrial Electronics*, vol. 61, no. 11, pp. 6399–6408, Nov. 2014. (SCI)

[32] **Qinglai Wei**, Derong Liu, Qiao Lin, and Ruizhuo Song, "Adaptive dynamic programming for discrete-time zero-sum games," *IEEE Transactions on Neural Networks and Learning Systems*, vol. 29, no. 4, pp. 957–969, Apr. 2018. (SCI)

[33] **Qinglai Wei**, Frank L. Lewis, Derong Liu, Ruizhuo Song, and Hanquan Lin, "Discrete-time local value iteration adaptive dynamic programming: Convergence analysis," *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, vol. 48, no. 6, pp. 875–891, Jun. 2018. (SCI)

[34] **Qinglai Wei**, Frank L. Lewis, Qiuye Sun, Pengfei Yan, and Ruizhuo Song, "Discrete-time deterministic *Q*-learning: A novel convergence analysis," *IEEE Transactions on Cybernetics*, vol.

47, no. 5, pp. 1224–1237, May 2017. (SCI)

[35] **Qinglai Wei**, Derong Liu, Guang Shi, and Yu Liu, "Multibattery optimal coordination control for home energy management systems via distributed iterative adaptive dynamic programming," *IEEE Transactions on Industrial Electronics*, vol. 62, no. 7, pp. 4203–4214, Jul. 2015. (SCI)

[36] **Qinglai Wei** and Derong Liu, "A novel iterative θ-Adaptive dynamic programming for discrete-time nonlinear systems," *IEEE Transactions on Automation Science and Engineering*, vol. 11, no. 4, pp. 1176–1190, Oct. 2014. (SCI)

[37] **Qinglai Wei** and Derong Liu, "Adaptive dynamic programming for optimal tracking control of unknown nonlinear systems with application to coal gasification," *IEEE Transactions on Automation Science and Engineering*, vol. 11, no. 4, pp. 1020–1036, Oct. 2014. (SCI)

[38] **Qinglai Wei,** Derong Liu, and Qiao Lin, "Discrete-time local iterative adaptive dynamic programming: Terminations and admissibility analysis," *IEEE Transactions on Neural Networks and Learning Systems*, vol. 28, no. 11, pp. 2490–2502, Nov. 2017. (SCI)

[39] **Qinglai Wei**, Derong Liu, Qiao Lin, and Ruizhuo Song, "Discrete-time optimal control via local policy iteration adaptive dynamic programming," *IEEE Transactions on Cybernetics*, vol. 47, no. 10, pp. 3367–3379, Oct. 2017. (SCI)

[40] **Qinglai Wei,** Benkai Li, and Ruizhuo Song, "Discrete-time stable generalized self-learning optimal control with approximation errors," *IEEE Transactions on Neural Networks and Learning Systems*, vol. 29, no. 4, pp. 1226–1238, Apr. 2018. (SCI)

[41] **Qinglai Wei**, Derong Liu, Yu Liu, and Ruizhuo Song, "Optimal constrained self-learning battery sequential management in microgrid via adaptive dynamic programming," *IEEE/CAA Journal of Automatica Sinica*, vol. 4, no. 2, pp. 168–176, Apr. 2017. (SCI)

[42] **Qinglai Wei**, Nikola Kasabov, Marios Polycarpou, Zhigang Zeng, "Deep learning neural networks: Methods, systems, and applications," *Neurocomputing*, vol. 396, pp. 130–132, Apr. 2020.

[43] **Qinglai Wei**, Derong Liu, and Frank L. Lewis, "Optimal distributed synchronization control for continuous-time heterogeneous multi-agent differential graphical games," *Information Sciences*, vol. 317, pp. 96–113, Oct. 2015. (SCI)

[44] **Qinglai Wei** and Derong Liu, "A novel policy iteration based deterministic Q-learning for discrete-time nonlinear systems," *Science China Information Sciences,* vol. 58, no. 12, pp 1–15, Dec. 2015. (SCI)

[45] **Qinglai Wei**, Ruizhuo Song, and Qiuye Sun, "Nonlinear neuro-optimal tracking control via stable iterative Q-learning algorithm," *Neurocomputing,* vol. 168, pp. 520–528, Nov. 2015. (SCI)

[46] **Qinglai Wei** and Derong Liu, "Neural-network-based adaptive optimal tracking control scheme for discrete-time nonlinear systems with approximation errors," *Neurocomputing*, vol. 149, no. 3 pp. 106–115, Feb. 2015. (SCI)

[47] **Qinglai Wei**, Ruizhuo Song, Qiuye Sun, and Wendong Xiao, "Off-policy IRL optimal tracking control for continuous-time chaotic systems," Chinese Physics B, vol. 24, no. 9, pp. 090504(6), 2015. (SCI)

[48] **Qinglai Wei,** Derong Liu, and Yancai Xu, "Policy iteration optimal tracking control for chaotic systems by adaptive dynamic programming approach," Chinese Physics B, vol. 24, no. 3 pp. 030502-1–9, Mar. 2015. (SCI)

[49] **Qinglai Wei,** Derong Liu, and Yancai Xu, "Neuro-optimal tracking control for a class of discrete-time nonlinear systems via generalized value iteration adaptive dynamic programming approach," *Soft Computing*, vol. 20, no. 2, pp. 697–706, Feb. 2016. (SCI)

[50] **Qinglai Wei** and Derong Liu, "Stable iterative adaptive dynamic programming algorithm with approximation errors for discrete-time nonlinear systems," *Neural Computing & Applications*, vol. 24, no. 6, pp. 1355–1367, May 2014. (SCI)

[51] **Qinglai Wei**, Ding Wang, and Dehua Zhang, "Dual iterative adaptive dynamic programming for a class of discrete-time nonlinear systems with time-delays," *Neural Computing & Applications*, vol. 23, no. 7–8, pp. 1851–1863, Dec. 2013. (SCI)

[52] **Qinglai Wei** and Derong Liu, "Numerical adaptive learning control scheme for discrete-time non-linear systems," *IET Control Theory & Applications*, vol. 7, no. 11, pp. 1472–1486, July 2013. (SCI)

[53] **Qinglai Wei** and Derong Liu, "An iterative \epsilon-optimal control scheme for a class of discrete-time nonlinear systems with unfixed initial state," *Neural Networks*, vol. 32, pp. 236–244, August 2012. (SCI)

[54] **Qinglai Wei**, Huaguang Zhang, and Jing Dai, "Model-free multiobjective approximate dynamic programming for discrete-time nonlinear systems with general performance index functions", *Neurocomputing*, vol.72, no.7–9, pp.1839–1848, 2009. (SCI)

[55] **Qinglai Wei**, Huaguang Zhang, and LiLi Cui, "Data-based optimal control for discrete-time zero-sum games of 2-d systems using adaptive critic designs", *ACTA Automatica Sinica,* vol.35, no.6, pp. 682–692, 2009. (EI)

[56] **Qinglai Wei**, Huaguang Zhang, Derong Liu and Yan Zhao, "An optimal control scheme for a class of discrete-time nonlinear systems with time delays using adaptive dynamic programming," *ACTA Automatica Sinica*, vol. 36, no.1, pp. 121–129, Jan 2010. (EI)

[57] **Qinglai Wei** and Derong Liu, "Finite horizon optimal control of discrete-time nonlinear systems with unfixed initial state using adaptive dynamic programming," *Journal of Control Theory and Applications*, vol. 9, no. 3, pp. 381–390, 2011. (EI)

Professional Certification and Awards

- Natural Science Award (First Prize), Chinese Association of Automation (CAA), Ranking 1/4, 2022
- China Association of Invention, Innovation Award First Prize, Ranking 1/6, 2021
- 2020 International Conference on Information, Cybernetics, and Computational Social Systems (ICCSS 2020) Zadeh Best Paper Award, Ranking 1/4, 2020
- Clarivate Analytic Global Highly Cited Scholar, 2019
- IEEE/CAA Journal of Automatica Sinica, Best Paper Award, 2019
- Acta Automatica Sinica, Associate Editor Award, 2018
- IEEE/CAA Journal of Automatica Sinica Outstanding Associate Editor Award, 2018
- IEEE System, Man, and Cybernetics Society, Andrew P. Sage Best Transactions Paper Award, 2018
- IEEE Transactions on Neural Network and Learning Systems Outstanding Paper Award, 2018
- Clarivate Analytic Global Highly Cited Scholar, 2018
- Acta Automatica Sinica Outstanding Associate Editor Award, 2018
- IEEE/CAA Journal of Automatica Sinica Outstanding Associate Editor Award, 2018
- Yang Jiachi Science and Technology Awards, Chinese Association of Automation (CAA), 2017
- Natural Science Award (First Prize), Chinese Association of Automation (CAA), Ranking 2/3, 2017
- National Natural Science Foundation for Outstanding Youth Scholars of China, 2017
- Young Scientist Award, Chinese Association of Automation (CAA), 2017
- Best Paper Award, 2017 IEEE 6th Data Driven Control and Learning Systems Conference (DDCLS), 2017
- Young Researcher Award, Asia Pacific Neural Network Society (APNNS), 2016
- Best Paper Award, The 27th Chinese Control and Decision, Conference (CCDC), 2015
- Beijing Science and Technology Award (Third Prize), Ranking 2/5, 2015
- Jiangsu Shuang-Chuang Talents, Jiangsu Province, China, 2014
- Huai-Shang Outstanding Scholar of Huai'an, Jiangsu Province, China, 2013
- 10th World Congress on Intelligent Control and Automation (WCICA 2012), Best Theoretical Paper Award Finalist, 2012
- Best Paper Award, Acta Automatica Sinica, 2011

- Director Awards, 2011 and 2013, The State Key Laboratory of Management and Control for Complex Systems, Institute of Automation, Chinese Academy of Sciences

Journal Editorship

1) 2022.1–今，IEEE Transactions on Intelligent Vehicles, Associate Editor
2) 2021.3–今，Neurocomputing, **Associate Editor-in-Chief (AEIC)**
3) 2021.2–今，**IEEE/CAA Journal of Automatica Sinica**, **Deputy Editor-in-Chief (DEIC)**
4) 2021.1–今，International Journal of Intelligent Control and Systems, **Deputy Editor-in-Chief (DEIC)**
5) 2020.10–今，《自动化学报》，**副主编**
6) 2021.2–今，**IEEE Transactions on Artificial Intelligence**, Associate Editor
7) 2020.8–今，《智能科学与技术学报》，编委
8) 2020.1–今，《复杂性与智能化》，副主编
9) 2014.1–2015.12 and 2019.1–今，**IEEE Transactions on Neural Networks and Learning Systems**, Associate Editor
10) 2018.1–今，**IEEE/CAA Journal of Automatica Sinica,** Associate Editor
11) 2017.7–今，**IEEE Transactions on Automation Science and Engineering**, Associate Editor
12) 2017.7–今，**《控制工程》**，编委
13) 2017.4–2022.12，**IEEE Transactions on Consumer Electronics**, Associate Editor
14) 2017.1–今，**IEEE Transactions on Cognitive and Developmental Systems**, Associate Editor
15) 2016.1–今，**IEEE Transactions on Systems, Man, and Cybernetics: Systems**, Associate Editor
16) 2016.1–今，**Information Sciences**, Associate Editor
17) 2016.1–今，**Neurocomputing**, Member of Editorial Board
18) 2016.9–今，**Optimal Control Applications and Methods**, Subject Editor
19) 2015.1–今，**《自动化学报》**，编委
20) **Optimal Control Applications and Methods,** Leading Guest Editor
    Qinglai Wei, Ruizhuo Song, Pinjia Zhang, Special Issue on "Data-Based Learning Control for Optimization of Nonlinear Systems," May 2021.
21) **IEEE Transactions on Evolutionary Computation,** Guest Editor
    Fei-Yue Wang, **Qinglai Wei**, Ke Tang, and Carlos A. Coello Coello, Special Issue on "Parallel Evolution for Large Scale Optimization," Oct. 2018.
22) **Neurocomputing**, Leading Guest Editor

Qinglai Wei, Nikola Kasabov, Marios Polycarpou, Zhigang Zeng, Special issue on “Deep Learning Neural Networks: Methods, Systems, and Applications,” *Neurocomputing*, Mar. 2018.

23) **Neurocomputing**, Guest Editor
Zhigang Zeng, Amir Hussain, and **Qinglai Wei**, Special issue on “International Symposium on Neural Networks,” *Neurocomputing*, Feb. 2014.

24) **Neural Computing & Applications,** Guest Editor
Stefano Squartini, Jinhu Lu, and **Qinglai Wei**, Special issue on “The Neural Paradigm for Complex Systems: New Algorithms and Applications,” *Neural Computing & Applications*, Feb. 2013.

Personal Website

https://people.ucas.ac.cn/~weiqinglai