Guancheng Wang

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Zhanjiang, Guangdong - 524088, China

广东海洋大学硕士研究生招生：电子信息 **(085400)**

要求:

1. 通过大学英语四级;
2. 本科专业为计算机，电子信息，自动化，通信工程等相关专业;
3. 拥有一定的科研经历，有论文发表经历更佳。

硕士研究方向: 智能计算，优化问题、机器人、多智能体等
备注: 我会手把手指导，跟你一起完成论文。期待你硕士期间能投稿两篇论文，并有意愿读博。

Recruitment of Master for Major "Electronic Information" (085400) in GDOU

Requirement:

1. Passed CET-4;
2. Bachelor's degree background in majors such as Computer Science, Electronic Information, Automation, Communication Engineering, or related fields;
3. Having some research experience is preferred, and publication experience is a plus.

Master's research directions: Intelligent computing, optimization problems, robotics, and multi-agent systems, and etc.
Note: I will provide hands-on guidance and work with you to complete the papers. I hope you can submit two papers during your master's program and have the intention to pursue a Ph.D. in the future.

Experience

• **Guangdong Ocean University [https://www.gdou.edu.cn/]**

- Lecturer Jan. 2024 - Mar. 2024
- Associate Professor Mar. 2024 - Present
- Master's Supervisor Jul. 2024 - Present

Education

• **University of Macau** *Aug. 2020 - Oct. 2023*
Doctor of Philosophy in Computer Science Macau, China

• **University of Macau** *Aug. 2014 - Oct. 2017*
Master of Science in Electrical and Computer Engineering Macau, China

• **SUN YAT-SEN University** *Sep. 2010 - Jun. 2014*
Bachelor of Engineering in Automation Guangzhou, China

Projects [PI or Co-I]

1. Robust Neural Dynamics Models and Their Adaptive Discretization for Time-Varying Quadratic Programming; National Natural Science Foundation of China; 2026–2026. (PI)
2. Research on Acoustic Localization Models Based on Noise-Resistant Gradient Neural Dynamics; Zhanjiang Non-funded Science and Technology Research Program; 2025-2027. (PI)
3. Design and Analysis of Novel Second-Order Optimizers Based on Control Theory for Large-Scale Parameter Optimization Problems; Guangdong Ocean University, China; 2024–2027. (PI)
4. Real-time and Robust Solving Mechanisms for Underwater Acoustic Localization Problems Based on Neural Dynamics; National Natural Science Foundation of China; 2025–2028. (CO-I)

5. Neurodynamics-Based Solving for Marine Image Optimization Problems; Natural Science Foundation of Guangdong Province, China; 2023–2025. (CO-I)

6. Novel Multi-Target Recognition Model for Remote Sensing Images and Its Highly Robust Neurodynamics Solving Algorithm; Guangdong Ocean University, China; 2022–2023. (CO-I)

7. Research on Neurodynamics Solutions for Time-Varying Problems and Its Applications; Natural Science Foundation of Guangdong Province, China; 2021–2023. (CO-I)

REVIEWER SERVICES

1. Chaos, solitons and fractals; Computers and electronics in agriculture; Engineering applications of artificial intelligence; Neurocomputing; Expert Systems with Applications; Neural Networks; Applied Soft Computing; Smart agricultural technology

2. CAAI Transactions on Intelligence Technology; Computational Intelligence

3. IEEE Transactions on Industrial Electronics; IEEE/CAA Journal of Automatica Sinica

4. Sensors; Electronics; Applied Sciences

PUBLICATIONS

1. Wen, Y., Liu, Y., Liang, Z., Xu, G., Lin, C., & **Wang, G.** (2026). A Gradient-Projected Model for Image Denoising. *Sensors*, 26(1), 13.

2. Huang, S., Xiao, X., & **Wang, G.**, (2026). MGRNN for dynamic constrained quadratic programming with verification and applications. *Expert Systems with Applications*, 299, 130034.

3. Xu, G., Lin, Z., Shi, Y., Wu, J., Xu, H., **Wang, G.**, & Zhang, T. (2025). Recognition of chlorophyll rings using YOLOv8. *Scientific Reports*, 15(1), 13934.

4. Liang, L., **Wang, G.**, Lin, C., & Feng, Z. (2025). PTE: Prompt tuning with ensemble verbalizers. *Expert Systems with Applications*, 262, 125600.

5. Feng, Z., Xing, Y., & **Wang, G.*** (2024). Distributed opinion competition scheme with gradient-based neural network in social networks. *Scientific Reports*, 14(1), 30883.

6. Luo, T., **Wang, G.**, & Xiao, X. (2024). New zeroing NN models with nonconvex saturated activation functions in noisy environments for quadratic minimization dynamics and control. *Journal of Computational and Applied Mathematics*, 448, 115884.

7. Zhou, J., **Wang, G.**, Zeng, S., & Zhang, B. (2023). Learning with Euler Collaborative Representation for Robust Pattern Analysis. *ACM Transactions on Intelligent Systems and Technology*, 14(6), 1-25.

8. Xiao, X., Jiang, C., Jin, L., Huang, H., & **Wang, G.** (2023). Nonlinear RNN with noise-immune: A robust and learning-free method for hyperspectral image target detection. *Expert Systems with Applications*, 229, 120490.

9. He, H., Jiang, C., Xiao, X., & **Wang, G.*** (2023). A dynamic matrix equation solution method based on NCBC-ZNN and its application on hyperspectral image multi-target detection. *Applied Intelligence*, 53(19), 22267-22281.

10. **Wang, G.**, Hao, Z., Li, H., & Zhang, B. (2023). An activated variable parameter gradient-based neural network for time-variant constrained quadratic programming and its applications. *CAAI Transactions on Intelligence Technology*, 8(3), 670-679.

11. Hao, Z., **Wang, G.**, Zhang, B., Fang, L., & Li, H. (2023). An isomerism learning model to solve time-varying problems through intelligent collaboration. *IEEE/CAA Journal of Automatica Sinica*, 10(8), 1772-1774.

12. Hao, Z., **Wang, G.**, Zhang, B., Feng, Z., Li, H., Chong, F., Pan Y., & Li, W. (2023). A novel public sentiment analysis method based on an isomerism learning model via multiphase processing. *IEEE Transactions on Neural Networks and Learning Systems*, 36(1), 249-259.

13. **Wang, G.**, Hao, Z., Huang, H., & Zhang, B. (2023). A proportional-integral iterative algorithm for time-variant equality-constrained quadratic programming problem with applications. *Artificial Intelligence Review*, 56(5), 4535-4556.

14. Li, Q., Zhuang, Y., Zou, L., & **Wang, G.*** (2023). Accelerated adaptive gradient neural dynamics models for solving time-variant lyapunov equation and their applications. *IEEE Access*, 11, 29474-29482.

15. Xiao, H., Wang, Z., & **Wang, G.** (2023). Influence factors on illuminance distribution uniformity and energy saving of the indoor illumination control method. *Applied Optics*, 62(10), 2531-2540.

16. **Wang, G.**, Hao, Z., Zhang, B., Fang, L., & Mao, D. (2023). A robust newton iterative algorithm for acoustic location based on solving linear matrix equations in the presence of various noises. *Applied Intelligence*, 53(2), 1219-1232.

17. Song, Z., Lu, Z., Wu, J., Xiao, X., & **Wang, G.** (2022). Improved ZND model for solving dynamic linear complex matrix equation and its application. *Neural Computing and Applications*, 34(23), 21035-21048.

18. **Wang, G.**, Li, Q., Liu, S., Xiao, H., & Zhang, B. (2022). New zeroing neural network with finite-time convergence for dynamic complex-value linear equation and its applications. *Chaos, Solitons & Fractals*, 164, 112674.

19. Xiao, H., **Wang, G.**, W., Lu, S., Zhao, B., Wang, Z., ... & Liu, J. (2022). Automatic illumination control method for indoor luminaires based on multichromatic quantum dot light-emitting diodes. *Micromachines*, 13(10), 1767.

20. Chen, X., Li, Q., Zeng, X., Zhang, C., Xu, G., & **Wang, G.*** (2022). A hybrid ARIMA-GABP model for predicting sea surface temperature. *Electronics*, 11(15), 2359.

21. **Wang, G.**, Hao, Z., Zhang, B., & Jin, L. (2022). Convergence and robustness of bounded recurrent neural networks for solving dynamic Lyapunov equations. *Information Sciences*, 588, 106-123.

22. Xiao, H., Li, Y., Li, B., & **Wang, G.** (2022). An Investigation on CCT and Ra Optimization for Trichromatic White LEDs Using a Dual-Weight-Coefficient-Based Algorithm. *Micromachines*, 13(2), 276.

23. Zhao, Z., Hao, Z., **Wang, G.**, Mao, D., Zhang, B., Zuo, M., ... & Tu, G. (2021). Sentiment analysis of review data using blockchain and LSTM to improve regulation for a sustainable market. *Journal of Theoretical and Applied Electronic Commerce Research*, 17(1), 1-19.

24. Gu, S., **Wang, G.**, & Zhang, B. (2021, August). COMASNet: Precise Face Mask Detector Network. In *2021 4th International Conference on Pattern Recognition and Artificial Intelligence (PRAI)* (pp. 129-133). IEEE.

25. Hao, Z., **Wang, G.**, Mao, D., Zhang, B., Li, H., Zuo, M., ... & Yen, J. (2021). A novel method for food market regulation by emotional tendencies predictions from food reviews based on blockchain and saes. *Foods*, 10(6), 1398.

26. Huang, H., Fu, D., **Wang, G.**, Jin, L., Liao, S., & Wang, H. (2021). Modified Newton integration algorithm with noise suppression for online dynamic nonlinear optimization. *Numerical Algorithms*, 87(2), 575-599.

27. **Wang, G.**, Huang, H., Shi, L., Wang, C., Fu, D., Jin, L., & Xiuchun, X. (2021). A noise-suppressing Newton-Raphson iteration algorithm for solving the time-varying Lyapunov equation and robotic tracking problems. *Information Sciences*, 550, 239-251.

28. Huang, H., Fu, D., Zhang, J., Xiao, X., **Wang, G.**, & Liao, S. (2020). Modified Newton integration neural algorithm for solving the multi-linear M-tensor equation. *Applied Soft Computing*, 96, 106674.

29. **Wang, G.**, Li, D., Chen, X., & Huang, H. (2020, October). Two modified Newton-Raphson iteration algorithms for Yang-Baxter-like matrix equation with step-size analyses. In *2020 35th Youth Academic Annual Conference of Chinese Association of Automation (YAC)* (pp. 259-263). IEEE.

30. Xiao, X., Fu, D., **Wang, G.**, Liao, S., Qi, Y., Huang, H., & Jin, L. (2020). Two neural dynamics approaches for computing system of time-varying nonlinear equations. *Neurocomputing*, 394, 84-94.

31. Liao, S., Liu, J., Xiao, X., Fu, D., **Wang, G.**, & Jin, L. (2020). Modified gradient neural networks for solving the time-varying Sylvester equation with adaptive coefficients and elimination of matrix inversion. *Neurocomputing*, 379, 1-11.

32. Wang, H., Fu, D., Liao, S., **Wang, G.**, & Xiao, X. (2019, December). Significant wave height prediction based on MSFD neural network. In *2019 Tenth International Conference on Intelligent Control and Information Processing (ICICIP)* (pp. 1-5). IEEE.

33. **Wang, G.**, Zhu, Y., Chan, C. H., & Martins, R. P. (2018). Gain error calibrations for two-step ADCs: optimizations either in accuracy or chip area. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 26(11), 2279-2289.

34. **Wang, G.**, Li, C., Zhu, Y., Zhong, J., Lu, Y., Chan, C. H., & Martins, R. P. (2018). Missing-code-occurrence probability calibration technique for DAC nonlinearity with supply and reference circuit analysis in a SAR ADC. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 65(11), 3707-3719.

35. **Wang, G.**, Zhu, Y., Chan, C. H., Seng-Pan, U., & Martins, R. P. (2017, September). A missing-code-detection gain error calibration achieving 63dB SNR for an 11-bit ADC. In *ESSCIRC 2017-43rd IEEE European Solid State Circuits Conference* (pp. 239-242). IEEE.