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RESEARCH INTERESTS

- Data Center Networks
- Endogenous Security
- Reliable Communication
- Fault-Tolerant Routing
- Fault Diagnosis
- Social Networks

EDUCATION

| | |
|---|------------------------------|
| Fuzhou University | <i>Sep. 2020 - Present</i> |
| Doctoral Candidate in Computer Science and Technology | |
| Fuzhou University | <i>Sep. 2016 - Jun. 2020</i> |
| B.Eng. in Information Security | |

PUBLICATIONS AND PATENTS

- [1] **Wanling Lin**, Xiao-Yan Li, Jou-Ming Chang, Dong Xiang, Xiaohua Jia, “Link/Switch fault-tolerant Hamiltonian path embedding in BCube networks for deadlock-free routing”, *IEEE Transactions on Dependable and Secure Computing*, vol. 22, no. 5, pp. 4829-4846, 2025.
- [2] **Wanling Lin**, Xiao-Yan Li, Jou-Ming Chang, Xiaohua Jia, “Link/Switch failure analysis of data center networks on matroidal connectivity”, *IEEE Transactions on Networking*, vol. 33, no. 3, pp. 1220-1235, 2025.
- [3] **Wanling Lin**, Xiao-Yan Li, Jou-Ming Chang, Xiaohua Jia, “Constructing multiple CISTs on BCube-based data center networks in the occurrence of switch failures”, *IEEE Transactions on Computers*, vol. 72, no. 7, pp. 1971-1984, 2023.
- [4] **Wanling Lin**, Jou-Ming Chang, Xiao-Yan Li, “DACS: Distributed adjustable computation scheme in highly scalable data center networks based on multi-protection routing”, *Journal of Network and Computer Applications*, vol. 247, Art. no. 104425, 2026.
- [5] **Wanling Lin**, Jou-Ming Chang, Hai Liu, Xiao-Yan Li, “Identifying social network influencers: A scheme based on TOPSIS and network decomposition”, *Expert Systems with Applications*, vol. 310, Art. no. 131300, 2026.
- [6] **Wanling Lin**, Hongbin Zhuang, Xiao-Yan Li, Yufang Zhang, “Reliability evaluation of generalized exchanged X -cubes under the R_g -conditional restriction”, *The Journal of Supercomputing*, vol. 80, no. 8, pp. 11401-11430, 2024.
- [7] **Wanling Lin**, Zhaoding Lin, Hongbin Zhuang, Xiao-Yan Li, “Enhancing reliability of folded Petersen networks based on edge partition”, *International Journal of Foundations of Computer Science*, vol. 36, no. 04, pp. 583-598, 2025.
- [8] Xiao-Yan Li, **Wanling Lin**, Ximeng Liu, Cheng-Kuan Lin, Kung-Jiu Pai, Jou-Ming Chang, “Completely independent spanning trees on BCCC data center networks with an application to fault-tolerant routing”, *IEEE Transactions on Parallel and Distributed Systems*, vol. 33, no. 8, pp. 1939-1952, 2022.

- [9] Xiao-Yan Li, Wanling Lin, Jou-Ming Chang, Xiaohua Jia, “Transmission failure analysis of multi-protection routing in data center networks with heterogeneous edge-core servers”, *IEEE/ACM Transactions on Networking*, vol. 30, no. 4, pp.1689-1702, 2022.
- [10] Xiao-Yan Li, Wanling Lin, Wenzhong Guo, Jou-Ming Chang, “A secure data transmission scheme based on multi-protection routing in datacenter networks”, *Journal of Parallel and Distributed Computing*, vol. 167, pp. 222-231, 2022.
- [11] Hongbin Zhuang, Wanling Lin, Jou-Ming Chang, Xiao-Yan Li, and Xiaohua Jia, “Optimal fault-tolerant path and cycle embedding of hypercube networks under the PEF Model”, *IEEE Transactions on Computers*, 10.1109/TC.2026.3654555.
- [12] Hongbin Zhuang, Wanling Lin, Xiao-Yan Li, Jou-Ming Chang, “Matroidal connectivity and conditional matroidal connectivity of star graphs”, *Theoretical Computer Science*, vol. 977, 2023, Art. no. 114173.
- [13] 李小燕, 林婉玲, 刘西蒙, 郭文忠, 林政宽, “一种数据中心网络BCCC上数据的并行传输方法”, 2022. (Chinese Patent)
- [14] Yufang Zhang, Ximeng Liu, Xiaoyan Li, Wanling Lin, Hongbin Zhuang, “The R_g -conditional connectivity and diagnosability of generalized exchanged X-cubes”, *In the proceedings of 21th QRS-C*, pp. 897-904, 2021.
- [15] Wanling Lin, Xiao-Yan Li, Xiangke Wang, Hongbin Zhuang, Jou-Ming Chang, “Partition-based adaptive fault diagnosis for BCCC data center networks with reduced testing overhead”, *IEEE Transactions on Reliability*, (Under Review).
- [16] Xiao-Yan Li, Hai Liu, Wanling Lin, Hao Liu, Jou-Ming Chang, “Analysis of BCube datacenter network reliability based on network subversion, neighbor connectivity, and cascading failures”, *IEEE Transactions on Networking*, (Under Review).
- [17] Xiao-Yan Li, Shihui Wei, Wanling Lin, Jou-Ming Chang, Xiaohua Jia, “Reconstructing social networks efficiently: A structure and cost-aware approach with multi-node deletion”, *IEEE Transactions on Knowledge and Data Engineering*, (Under Review).

ACADEMIC SERVICE

- Invited reviewer of (1) IEEE Transactions on Communications, (2) IEEE Transactions on Reliability, (3) The Journal of Supercomputing, (4) Cluster Computing, (5) Peer-to-peer networking and applications.
- Invited talks at the 7th, 10th, and 11th Cross-Strait Conferences on Network Fault Tolerance and Fault Diagnosis.

SELECTED HONORS AND AWARDS

- Excellent Undergraduate Graduate of Fuzhou University, 2020.
- Outstanding Undergraduate Dissertation Award in Fuzhou University, 2020.
- Freshman Special Scholarship for Master Candidate in Fuzhou University, 2020.
- First-Class Midterm Study Scholarship for Master Students in Fuzhou University, 2022.
- Freshman Special Scholarship for Doctoral Candidate in Fuzhou University, 2022.
- National Scholarship for Doctoral Students, 2024.