

王秋艳

邮箱: wangyan198801@163.com

一、简介

王秋艳，硕士生导师，副教授，天津市“131”创新型人才培养工程第三层次人选”，担任天津工业大学物联网系副主任职务，发表论文 SCI 论文 30 余篇，论文累计引用次数超过 200 余次，多篇论文发表在中科院二区和 CCF 期刊中，担任 Discrete mathematics, Discrete Applied Mathematics 及 Cryptography and Communications 等多个期刊的审稿人，具有较高的影响力。

Google 学术主页：

<https://www.researchgate.net/profile/Wang-Qiuyan>

团队聚焦：智能机器人关键技术，研究方向涵盖机器人感知、决策、控制及系统集成，重点突破以下领域：环境感知与多模态融合、自主决策与运动规划、人机交互与智能控制；团队合作模式采用产学研深度绑定、工程与科研并重，对接企业需求；团队理念：**以智能驱动未来，用技术赋能现实**；秉持“前沿探索、技术落地、开放协作、持续突破”的核心价值观，致力于推动智能机器人技术的创新与实践。

适合对计算机、电子、机械交叉领域有热情的学生，需具备：嵌入式开发、深度学习（PyTorch）、实时控制（C++/RTOS）等知识。

二、教育经历

2012-09 至 2016-07，中国科学院大学（信息安全国家重点实验室），计算机科学与技术，博士

三、科研与学术工作经历

- (1) 2020-12 至今, 天津工业大学, 计算机学院, 副教授
- (2) 2019-03 2020-01, 新加坡南洋理工大学, 理学院, 访问学者
- (3) 2016-07 至 2020-11, 天津工业大学, 计算机学院, 讲师

四、科研项目/课题:

- (1) 国家自然科学基金委员会, 青年项目, 61602342, 基于特征和的周期序列与线性码研究, 19 万元, 结题, 主持
- (2) 天津自然科学基金委员会, 青年项目, 18JCQNJC70300, 周期序列的线性复杂度与 k -错线性复杂度的分布性质研究, 6 万元, 结题, 主持
- (3) 天津市教委科研计划项目, 自然科学一般项目, 2018KJ215, 伪随机序列的构造与安全性指标分析, 6 万元, 结题, 主持
- (4) 应用数学福建省高校重点实验室开放课题, SX201804, 周期序列的伪随机性研究, 3 万元, 结题, 主持

五、代表性论著

1. **Qiuyan Wang**, Weixin Liu, et al. A class of nearly optimal codebooks and their applications in strongly regular Cayley graphs. *AIMS Mathematics*, 2024, 9(7): 18236-18246.
2. **Qiuyan Wang**, Xiaodan Liang, Rize Jin, Yang Yan: Applications of Strongly Regular Cayley Graphs to Codebooks. *IEEE Access* 11: 106980-106986 (2023)
3. Yang Yan, **Qiuyan Wang**, Lin Liu: Latent Influence Based Self-Attention Framework for Heterogeneous Network Embedding. *IEICE Trans. Inf. Syst.* 105-D(7): 1335-1339 (2022)

4. Yuhua Sun, Tongjiang Yan, **Qiuyan Wang**: The 2-adic complexity of Yu-Gong sequences with interleaved structure and optimal autocorrelation magnitude. *Des. Codes Cryptogr.* 89(4): 695-707 (2021)
5. **Qiuyan Wang**, Ziling Heng: Near MDS codes from oval polynomials. *Discret. Math.* 2021, 344(4): 112277.
6. Yang Yan, Yao Yao, Zhi Chen, **Qiuyan Wang**: Two New Families of Asymptotically Optimal Codebooks from Characters of Cyclic Groups. *IEICE Trans. Fundam. Electron. Commun. Comput. Sci.* 104-A(8): 1027-1032 (2021)
7. Gaojun Luo, Xiwang Cao, Dandan Wang, **Qiuyan Wang**: A new construction of approximately SIC-POVMs derived from Jacobi sums over finite fields. *Quantum Inf. Process.* 20(2): 68 (2021)
8. **Qiuyan Wang**, Yang Yan: Asymptotically Optimal Codebooks Derived From Generalised Bent Functions. *IEEE Access* 8: 54905-54909 (2020)
9. **Qiuyan Wang**; Chenhuang Wu; Minghui Yang; Yang Yan*; A Kind of Quaternary Sequences of Period $2p^m q^n$ and Their Linear Complexity, *Complex.* 2020, 5129450:1-5129450:9.
10. **Qiuyan Wang***; Yang Yan; Linear Complexity of n-Periodic Cyclotomic Sequences over F_p , *IEICE Trans. Fundam. Electron. Commun. Comput. Sci.*, 2020, 103-A (5): 785-791.
11. Ziling Heng; **Qiuyan Wang***; Cunsheng Ding; Two Families of Optimal Linear Codes and Their Subfield Codes, *IEEE Trans. Inf. Theory*, 2020, 66(11): 6872-6883.
12. Yang Yan; **Qiuyan Wang***; Ambiguity and deficiency for differentially δ -uniform monomial permutations on F_{2^n} , *Discret. Appl. Math.*, 2018, 235: 175-183.

其他研究成果:

13. **Qiuyan Wang***, Yupeng Jiang, Dongdai Lin. Linear complexity of binary generalized cyclotomic sequences over $GF(q)$, Journal of Complexity, vol.31, no. 5, 731—740, 2015. SCI
14. **Qiuyan Wang***, Kelan Ding, Rui Xue. Binary linear codes with two weights, IEEE Communications Letters, Vol. 19, no. 7, 1097—1100, 2015. SCI
15. **Qiuyan Wang***, Dongdai Lin, Xuan Guang. On the linear complexity of Legendre sequences over $GF(q)$, IEICE Trans. Fundamentals, vol. E97-A, no. 7, 1627—1630, 2014. SCI
16. **Qiuyan Wang***, Yupeng Jiang, Dongdai Lin, On the linear complexity of new modified Jacobi sequences, IEICE Trans. Fundamentals, vol. E97-A, no. 11, 2263—2266, 2014. SCI
17. **Qiuyan Wang***, Linear complexity of binary cyclotomic sequences of order 6, Journal of Applied Mathematics and Computing, vol. 49, 119-225, 2015, EI.
18. **Qiuyan Wang**, Yupeng Jiang, Dongdai Lin. Linear complexity of Ding-Helleseth sequences of order 2 over $GF(l)$, Cryptography and Communications, DOI 10.1007/s12095-015-0138-5. SCI
19. **Qiuyan Wang***, Dongdai Lin, Generalized cyclotomic numbers of order two and their applications, accepted by Cryptography and Communications, DOI 10.1007/s12095-015-0165-2, SCI

20. **Qiuyan Wang**, Dongdai Lin, Kelan Ding, Rui Xue, A kind of three-weight linear codes, *Cryptography and Communications*, DOI 10.1007/s12095-015-0180-3, SCI
21. **Qiuyan Wang**, Fei Li, Kelan Ding, Dongdai Lin: Complete weight enumerators of two classes of linear codes. *Discret. Math.*, 340(3), 467-480, 2017.
22. **Qiuyan Wang**, Yang Yan, Asymptotically optimal codebooks derived from generalised bent functions, *IEEE ACCESS*, 8(1), 54905-54909, 2021.
23. Ming Li, Yupeng Jiang, Dongdai Lin, **Qiuyan Wang**: Transition Mappings between De Bruijn Sequences. *IEICE Trans. Fundam. Electron. Commun. Comput. Sci.* 100-A(5), 1254-1256, 2017.
24. Yuyin Yu, Lishan Ke, Zhiqiang Lin, **Qiuyan Wang**: Permutation Polynomials over Z_{p^n} and Their Randomness. *IEICE Trans. Fundam. Electron. Commun. Comput. Sci.* 100-A(3), 913-915, 2017.
25. Yuhua Sun, Tongjiang Yan, **Qiuyan Wang**: The 2-adic complexity of Yu-Gong sequences with interleaved structure and optimal autocorrelation magnitude. *Des. Codes Cryptogr.* 89(4), 695-707 (2021)
26. Yuhua Sun, Qiang Wang, **Qiuyan Wang**, Tongjiang Yan: A lower bound on the 2-adic complexity of Whiteman's generalized

cyclotomic sequences of order 4 with length pq . IWSDA 2017, 169-172.

27. Gaojun Luo, Xiwang Cao, Dandan Wang, **Qiuyan Wang**: A new construction of approximately SIC-POVMs derived from Jacobi sums over finite fields. *Quantum Inf. Process.* 20(2), 68, 2021.
28. Li Han, Shimin Sun, Yang Yan, **Qiuyan Wang**: A New Construction of Codebooks Meeting the Levenshtein Bound. *IEEE Access* 8: 77598-77603, 2020.
29. Yuhua Sun, **Qiuyan Wang**^{*}, Yang Yan, Tongjiang Yan, Hui Li: Linear Complexity of Generalized Cyclotomic Sequences of Order 4 over \mathbb{F}_l . *Complex.* 2020: 6963487:1-6963487:8, 2020.
30. Zhixiong Chen, **Qiuyan Wang**^{*}: On the k -Error Linear Complexity of Binary Sequences Derived from the Discrete Logarithm in Finite Fields. *Complexity* 2019: 8635209:1-8635209:7, 2019.
31. 孔维刚, 李文婧, 王秋艳, 曹鹏程, 宋庆增, 基于改进 YOLOv4 算法的轻量化网络设计与实现, 计算机工程, 已经在线发表, 北大核心期刊.
32. Yang Yan, Yao Yao, Zhi Chen, **Qiuyan Wang**: Two new families of asymptotically optimal codebooks from characters of cyclic groups, *IEICE Trans. Fundam. Electron. Commun. Comput. Sci.* E104-A, 8, 1027-1032, 2021.