

尹燕凯

职称： 讲师

政治面貌： 中共党员

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教学科研简介

以第一作者身份发表了多篇高水平学术论文，主持并参与了多项科研项目，主要包括天津市生物医药科技重大专项子课题 1 项、研究生科研创新项目 1 项，参与国防科技创新特区项目 4 项等。担任 ICCCN2025、AIoT 2024 等国际会议 PC Member，IEEE Internet of Things Journal、ICRA 等国际期刊会议审稿人。

研究方向：深度图像处理、智能飞行器设计与控制、生物电信号处理等

研究生招生：硕士生 1-2 人/年

欢迎想提前接触科研项目锻炼的同学和我联系！

学习经历

- (1) 2020-09 至 2024-06，南开大学，人工智能，博士
- (2) 2022-11 至 2023-12，金沢大学 (日本)，电子情报通信学，联合培养博士
- (3) 2017-09 至 2020-06，齐鲁工业大学 (山东省科学院)，控制科学与工程，硕士
- (4) 2013-09 至 2017-06，齐鲁工业大学 (山东省科学院)，自动化，学士

工作经历

- (1) 2024-09 至今，天津工业大学，软件学院，讲师

主讲课程

Python 程序设计语言、工业互联网

- [1] **Yankai Yin**, Zhe Sun, Peiying Ruan, Ruidong Li*, and Feng Duan*. "Learned distributed image compression with decoder side information." *Digital Communications and Networks*. 2025, 11(2): 349-358. (中科院 2 区, IF: 7.9)
- [2] **Yankai Yin**, Zhe Sun, Peiying Ruan, Feng Duan*, Ruidong Li*, and Chi Zhu. "Cross view capture for distributed image compression with decoder side information." *The 2024 IEEE International Conference on Robotics and Automation (ICRA2024)*. (EI 会议, 机器人领域顶会)
- [3] **Yankai Yin**, Fei Kang, Xiaoquan Yan, Tao Li, and Feng Duan*. "A novel Penta-jet VTOL aerial robot: Modeling, control, and simulation verification." *Computers & Electrical Engineering*, 2023, 111: 108906. (中科院 3 区, IF: 4.3)
- [4] **Yankai Yin**, Chengcai Fu, and Fengying Ma*. "Global sensitivity analysis of a microbial fuel cell model." *International Journal of Electrochemical Science*, 2019, 14(11): 10592-10606. (中科院 4 区, IF:1.284)
- [5] Fengying Ma*, **Yankai Yin**, and Min Li. "Start-up process modelling of sediment microbial fuel cells based on data driven." *Mathematical Problems in Engineering*, 2019, 2019: 1-10. (中科院 4 区, IF:1.009)
- [6] Fengying Ma, **Yankai Yin**, and Wei Chen*. "Reliability analysis of power and communication network in drone monitoring system." *IEICE Transactions on Communications*, 2019, 102(10): 1991-1997. (中科院 4 区, IF: 0.58)
- [7] Fengying Ma, **Yankai Yin**, Shaopeng Pang, Jiaxun Liu, and Wei Chen*. "A data-driven based framework of model optimization and neural network modeling for microbial fuel cells." *IEEE Access*, 2019, 7: 162036-162049. (中科院 2 区, IF: 3.745)
- [8] **Yankai Yin**, Feng Duan*, and Fei Kang. "Design and control of penta-jet aerial vehicle." *The 14th International Conference on Intelligent Robotics and Applications*, 2021: 760-770. (EI 会议)
- [9] Fengying Ma*, **Yankai Yin**, and Kai Sun. "Fault diagnosis of microbial fuel cell based on wavelet packet and SOM neural network." *Chinese Control and Decision*

Conference (CCDC), 2019: 367-372. (EI 会议)

[10]Fengying Ma*, **Yankai Yin**, and Kai Sun. "Dynamic analysis of microbial fuel cell electrochemical model." Chinese Control and Decision Conference (CCDC), 2019: 3649-3653. (EI 会议)

[11]Jiaxun Liu, Zuoxun Wang, Fangfang Zhang*, **Yankai Yin**, and Fengying Ma. "Special characteristics and synchronizations of multi hybrid-order chaotic systems." Entropy, 2020, 22(6): 664. (中科院 3 区, IF:2.494)

[12]Fengying Ma, Lei Lian, Peng ji, **Yankai Yin**, and Wei Chen*. "Fault diagnosis scheme based on microbial fuel cell model." IEEE Access, 2020, 8: 224306-224317. (中科院 3 区, IF: 3.367)

[13]Tianyu Ouyang, **Yankai Yin**, Fei Kang, Jiachen Zhang, Yu Tian, Xiaoquan Yan, Wenchuan Kuang, Feng Duan*. "Modeling and controller design of vertical take-off and landing turbojet powered aircraft." International Conference on Automation-Intelligence-Safety & International Symposium on Autonomous Systems, 2024. (EI 会议)

[14]Yimeng Dong, Guangyao Liu, **Yankai Yin**, Mengxuan Wu, Feng Duan*. "Superpixel based hierarchical graph convolution for enhanced interpretability in semantic segmentation". IEEE International Conference on Robotics and Biomimetics. 2024: 1615-1620. (EI 会议)

教学科研项目

- 天津市研究生科研创新项目：面向灾后救援的喷气动力无人飞行器关键技术研究，项目负责人，项目号：2021YJSO2B01，已结题
- 天津市生物医药科技重大专项：介入式脑机接口技术应用及产品研发，子课题负责人，项目号：24ZXYSY00140，在研
- 企业委托项目：基于超像素的眼球识别与定位技术开发，项目负责人，项目号：20251200*****，在研
- 天津市研究生科研创新项目：基于无人机的风力发电机智能巡检系统，参与人，项目号：2022BKYZ049，已结题

- 国防科技创新特区项目 4 项，参与人

竞赛获奖

- 第十三届“挑战杯”中国大学生创业计划竞赛，省赛金奖、国赛银奖
- 第八届“互联网+”大学生创新创业大赛，省赛金奖、国赛铜奖
- 2018 年“创青春”全国大学生创业大赛，省赛金奖
- 第四届“互联网+”大学生创新创业大赛，省赛铜奖
- 第十二届“西门子杯”中国智能制造挑战赛，西部赛区一等奖
- 中俄工业创新大赛青少年机器人专项赛，国赛三等奖

学术、社会兼职

- IEEE MetaCom 2023, Registration Chair
- International Conference on Computer Communications and Networks (ICCCN2025), PC Member
- IEEE Annual Congress on Artificial Intelligence of Things (AIoT 2024), PC Member
- IEEE Internet of Things Journal, IEEE Transactions on Consumer Electronics, ICRA 等国际期刊会议审稿人
- IEEE ComSoc Internet Technical Committee (ITC), Member
- 昆山市科技招商合伙人