

# 赵超

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## 基本信息

性别:	男	出生年月:	1997 年 6 月
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## 研究兴趣

工业人工智能、数模混动建模及其在高端装备中的应用

## 工作经历

2025.4-至今	机械工程与自动化学院	东北大学	副教授
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## 教育背景

2019.9-2025.3	机械工程	华中科技大学	获工学博士
	指导老师: 沈卫明(加拿大工程院院士、IEEE Fellow)		
2023.8-2024.8	能源工程	米兰理工大学	博士联合培养
	指导老师: Enrico Zio (洪堡学者、IEEE Fellow)		
2015.9-2019.6	机械设计制造及其自动化	中南大学	获工学学士

## 学术成果

国际期刊文章 (第一作者: ESI 热点论文\*1, ESI 高被引\*4, 中科院一区\*10, 中科院二区\*3, 中科院三区\*1)

- [1] **C. Zhao**, E Zio, W. Shen, Domain Generalization for Cross-Domain Fault Diagnosis: an Application-oriented Perspective and a Benchmark Study, Reliability Engineering and System Safety. (2024). (**ESI 热点/高被引论文**, 影响因子: 7.247, 中科院 1 区 Top)
- [2] **C. Zhao**, W. Shen, A domain generalization network combining invariance and specificity towards real-time intelligent fault diagnosis, Mechanical Systems and Signal Processing. (2022). (**ESI 高被引论文**, 影响因子: 8.934, 中科院 1 区 Top)
- [3] **C. Zhao**, W. Shen, Adversarial Mutual Information-Guided Single Domain Generalization Network for Intelligent Fault Diagnosis, IEEE Transactions on Industrial Informatics. (2022). (**ESI 高被引论文**, 影响因子: 11.648, 中科院 1 区 Top)
- [4] **C. Zhao**, W. Shen, Dual Adversarial Network for Cross-Domain Open Set Fault Diagnosis, Reliability Engineering and System Safety. (2022). (**ESI 高被引论文**, 影响因子: 7.247, 中科院 1

区 Top)

[5] **C. Zhao**, W. Shen, Federated Domain Generalization: A Secure and Robust Framework for Intelligent Fault Diagnosis, IEEE Transactions on Industrial Informatics. (2023). (影响因子:11.648, 中科院 1 区 Top)

[6] **C. Zhao**, W. Shen, Mutual-assistance Semisupervised Domain Generalization Network for Intelligent Fault Diagnosis under Unseen Working Conditions, Mechanical Systems and Signal Processing. (2023). (影响因子: 8.934,中科院 1 区 Top)

[7] **C. Zhao**, W. Shen, Imbalanced domain generalization via Semantic-Discriminative augmentation for intelligent fault diagnosis, Advanced Engineering Informatics. (2024). (影响因子: 8.8, 中科院 1 区 Top)

[8] **C. Zhao**, W. Shen, Adaptive open set domain generalization network: Learning to diagnose unknown faults under unknown working conditions, Reliability Engineering and System Safety. (2022). (影响因子: 7.247,中科院 1 区 Top)

[9] **C. Zhao**, W. Shen, A federated distillation domain generalization framework for machinery fault diagnosis with data privacy, Engineering Applications of Artificial Intelligence. (2024). (影响因子: 8, 中科院 1 区 Top)

[10] **C. Zhao**, W. Shen, E Zio, H Ma, Multimodal unified generalization and translation network for intelligent fault diagnosis under dynamic environments, Engineering Applications of Artificial Intelligence. (2025). (影响因子: 8,中科院 1 区 Top)

[11] **C. Zhao**, W. Shen, E Zio, H Ma, Environment-Aware graph relational reasoning for interpretable and generalizable mechanical transmission system distributed fault diagnosis, Expert Systems with Applications. (2025). (影响因子: 8,中科院 1 区 Top)

[12] **C. Zhao**, G. Liu, W. Shen, A balanced and weighted alignment network for partial transfer fault diagnosis, ISA Transactions. (2022). (影响因子: 5.911, 中科院 2 区 Top)

[13] **C. Zhao**, E Zio, W. Shen, Multi-domain Class-imbalance Generalization with Fault Relationship-induced Augmentation for Intelligent Fault Diagnosis. IEEE Transactions on Instrumentation and Measurement. (2024). (影响因子:5.6, 中科院 2 区 Top)

[14] **C. Zhao**, G. Liu, W. Shen, L. Gao, A Multi-Representation-Based Domain Adaptation Network for Fault Diagnosis, Measurement. (2021). (影响因子: 5.131, 中科院 2 区 Top)

[15] **C. Zhao**, G. Liu, W. Shen, A dual-view alignment-based domain adaptation network for fault diagnosis, Measurement Science and Technology. (2021). (影响因子: 2.398, 中科院 3 区)

## 科研项目

- |     |                                |           |
|-----|--------------------------------|-----------|
| [1] | 机械学院引进人才配套经费项目（主持）             | 2025-2028 |
| [2] | 高端装备未来智造技术教育部重点实验室开放基金面上项目（主持） | 2025-2027 |

## 会议报告

- |     |   |      |      |
|-----|---|------|------|
| [1] | 中国机械工程学会工业大数据与智能系统分会学术年会暨第八届大数据驱动的智能制造学术会议（分会场邀请报告） | 湖北宜昌 | 2025 |
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## 所获奖励

[1]

博士国家奖学金

2022

[2]

首批中国科协青年人才托举工程博士生专项计划

2024

学术兼职

分会场主席: IEEE CSCWD, IEEE ICSRS  
青年编委: JDMD, Digital Twins and Applications  
学术期刊审稿人: TNNLS, TII, TKDE, TCYB, MSSP, RESS, EAAI, ND