Fei Gao

Curriculum Vitae

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EDUCATION

2021 Ph.D. in Aircraft Design, Northwestern Polytechnical University

Dissertation: Research on weapon system contribution degree under uncertainty based

on the mapping relationships

Supervisor: An Zhang

2016 B.E. in Detection, Guidance, and Control Technology, Northwestern

Polytechnical University

EMPLOYMENT & AFFILIATIONS

2022- Lecturer, Shandong Jiaotong University

RESEARCH FIELDS

Primary: Decision-making, Fuzzy logic

Secondary: Weapon system-of-systems, Human reliability analysis

PUBLISHED PAPERS

2024

"An integrated hesitant 2-tuple linguistic Pythagorean fuzzy decision-making method for single-pilot operations mechanism evaluation" (with Ying Zhang and Yijia Li), *Engineering Applications of Artificial Intelligence*, 130: 107771.

"An integrated linguistic Pythagorean fuzzy decision-making approach for risk analysis of offshore wind turbine" (with Jinfeng Li, Chencan Bi and Weikai He), *Ocean Engineering*, 291: 116450.

"A novel Fermatean fuzzy BWM-VIKOR based multi-criteria decision-making approach for selecting health care waste treatment technology" (with Meihong Han, Siyang Wang and Jie Gao), *Engineering Applications of Artificial Intelligence*, 127: 107451.

"Dependence assessment in human reliability analysis based on cloud model and best-worst method" (with Changcheng Ji and Wenjiang Liu), *Reliability Engineering & System Safety*, 224: 109770.

"An intuitionistic fuzzy weighted influence non-linear gauge system for equipment evaluation under system-of-systems warfare environment" (with Weikai He and Wenhao Bi), *Expert Systems with Applications*, 238: 122187.

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- 2023 "Ensemble extended belief rule-based systems with different similarity measures for classification problems" (with Weikai He and Wenhao Bi), International Journal of Approximate Reasoning, 163: 109054.
 - "Prioritization of key practices for marine diesel engine maintenance activities using 2-tuple linguistic term set and DEMATEL" (with Qingguo Shi and Yihuai Hu), *Ocean Engineering*, 286: 115644.
 - "A fast belief rule base generation and reduction method for classification problems" (with Wenhao Bi), *International Journal of Approximate Reasoning*, 160: 108964.
 - "Density-based approach for fuzzy rule interpolation", *Applied Soft Computing*, 143: 110402.
 - "Dependence assessment in human reliability analysis using the 2-tuple linguistic information and DEMATEL method" (with Wenjiang Liu, Xu Mu, Wenhao Bi, and An Zhang), *Process Safety and Environmental Protection*, 173: 191–201.
 - "A new belief rule base inference methodology with interval information based on the interval evidential reasoning algorithm" (with Chencan Bi, Wenhao Bi and An Zhang), *Applied Intelligence*, 53: 12504–12520.
 - "A novel rule generation and activation method for extended belief rule-based system based on improved decision tree" (with Junwen Ma, An Zhang, Wenhao Bi and Changhong Tang), *Applied Intelligence*, 53: 7355–7368.
 - "Prioritization of used aircraft acquisition criteria: A fuzzy best-worst method (BWM)-based approach" (with Weixiang Wang, Chencan Bi, Wenhao Bi and An Zhang), *Journal of Air Transport Management*, 107: 102359.
 - "An integrated risk analysis method for tanker cargo handling operation using the cloud model and DEMATEL method", *Ocean Engineering*, 266: 113021.
 - "Assessing dependence in human reliability analysis using probabilistic linguistic term sets" (with Shuida Bao and Wenhao Bi), *Annals of Nuclear Energy*, 175: 109261.
 - "A framework for extended belief rule base reduction and training with the greedy strategy and parameter learning" (with Wenhao Bi, An Zhang and Shuida Bao), *Multimedia Tools and Applications*, 81: 11127–11143.
 - "A distributed task reassignment method in dynamic environment for multi-UAV system" (with Mi Yang, An Zhang and Wenhao Bi), *Applied Intelligence*, 52: 1582–1601.
 - "Distributed task allocation with critical tasks and limited capacity" (with An Zhang, Mi Yang and Wenhao Bi), *Robotica*, 39 (11): 2008–2032.
 - "A novel weapon system effectiveness assessment method based on the interval-valued evidential reasoning algorithm and the analytical hierarchy process" (with Wenhao Bi and An Zhang), *IEEE Access*, 9: 53480–53490.

2022

2021

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"A greedy belief rule base generation and learning method for classification problem" (with An Zhang, Wenhao Bi and Junwen Ma), *Applied Soft Computing*, 98: 106856.

"Dependence assessment in human reliability analysis based on the interval evidential reasoning algorithm Under interval uncertainty" (with Wenhao Bi, An Zhang and Mi Yang), *IEEE Access*, 8: 222187–222198.

An Zhang and Mi Yang), *IEEE Access*, 8: 222187–222198 2020 "Weapon system operational effectiveness evaluation based

"Weapon system operational effectiveness evaluation based on the belief rule-based system with interval data" (with An Zhang and Wenhao Bi), *Journal of Intelligent & Fuzzy Systems*, 39 (5): 6687–6701.

"Belief rule-based dependence assessment method under interval uncertainty" (with An Zhang, Wenhao Bi, and Mi Yang), *Quality and Reliability Engineering International*, 36 (7): 2459–477.

"A new rule reduction and training method for extended belief rule base based on DBSCAN algorithm" (with An Zhang, Mi Yang and Wenhao Bi), International Journal of Approximate Reasoning, 119: 20–39.

2019 "A novel strong tracking cubature Kalman filter and its application in

maneuvering target tracking" (with An Zhang, Shuida Bao and Wenhao Bi), *Chinese Journal of Aeronautics*, 32 (11): 2489–2502.

TEACHING EXPERIENCE

Shandong Introduction to Measurement and Control Technology (undergraduate)

Jiaotong Analog Electronics (undergraduate)

University Digital Image Processing (undergraduate)

Sensor Technology and Applications (undergraduate)

SKILLS

Coding

Matlab, C++

Skills:

Languages: Chinese (native), English (fluent)

PROFESSIONAL SERVICE

Reviewer: IEEE Transactions on Cybernetics, IEEE Transactions on Fuzzy Systems, IEEE

Transactions on Reliability, Reliability Engineering & System Safety, Expert Systems with Applications, Ocean Engineering, Ships and Offshore Structures, Kybernetes, Soft Computing, Systems Journal of Intelligent & Fuzzy Systems, IEEE Access, Quality and Reliability Engineering International, Journal of

Taibah University for Science, International Journal of Information

Technology & Decision Making

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