Zhuoyong Shi

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EDUCATION

Northwestern Polytechnical University   *Sep. 2022 – Present*

M.Eng. Electronic Science and Technology   3.82/4.0 GPA   1/54 RANK

- China National Scholarship for Graduate Students; Academic First Class Scholarship
- ITU Generation Connect Youth Envoy (4 Individuals in China)
- Outstanding Graduate Student
- Research Interest: Machine Learning, Pattern Recognition, UAV, Mathematical Modeling

Xi'an Jiaotong University City College   *Sep. 2018 – Jun. 2022*

B.Eng. Electronic Information   3.31/4.0 GPA   3/108 RANK

- Outstanding Graduation Project
- Distinguished Graduate
- Academic Second Class Scholarship

PUBLICATIONS

Google Scholar: https://scholar.google.com/citations?user=iizm6rEAAAAJ

[J1] Jiandong Zhang, **Zhuoyong Shi***, Anli Zhang, et al. UAV Trajectory Prediction Based on Flight State Recognition [J], IEEE Transactions on Aerospace and Electronic Systems. (***SCI Q1 IF=4.4***)

DOI: 10.1109/TAES.2023.3303854

[J2] **Zhuoyong Shi**, Yetao Jia, Guoqing Shi*, et al. Design of motor skill recognition and hierarchical evaluation system for table tennis players [J], IEEE Sensors Journal. (***SCI Q1 IF=4.3***)

DOI: 10.1109/JSEN.2023.3346880

[J3] **Zhuoyong Shi**, Guoqing Shi, Jiandong Zhang*, et al. Design of UAV Flight State Recognition System for Multi-sensor Data Fusion [J], IEEE Sensors Journal. (***SCI Q1 IF=4.3***)

DOI: 10.1109/JSEN.2024.3394883

[J4] Anli Zhang, **Zhuoyong Shi**, et al. Design of Wireless Motion Sensor Node Monitoring System Based on LabVIEW [J], Foreign Electronic Measurement Technology. (***PKU IF=1.74***)

DOI: 10.19652/j.cnki.femt.2103232

[C1] **Zhuoyong Shi***, et al. Design of motion pattern recognition system based on artificial intelligence methods [C], 2023 International Conference on Cyber-Physical Social Intelligence.

DOI: 10.1109/ICCSI58851.2023.10303805

[C2] **Zhuoyong Shi***, et al. Autonomous Security Evaluation Model for UAV Based on Airborne Information [C], 2023 6th International Conference on Information Communication and Signal Processing.

DOI: 10.1109/ICICSP59554.2023.10390620

[P1] Anli Zhang, **Zhuoyong Shi**, et al. An Evaluation Method for Aircraft Atmospheric Data Security Monitoring System [P], Invention Patent in China.

Patent No: CN202310946630.7

[P2] Anli Zhang, **Zhuoyong Shi**, et al. Unmanned aerial vehicle track prediction method based on flight mode identification [P], Invention Patent in China.

Patent No: CN202311576511.3

COMPETITIONS

"Electrical Cup" China Undergraduate Mathematical Contest in Modeling	Aug. 2021
National **Top Prize**, Team Award (***Team leader***)	
The National Undergraduate Mathematics Competitions	Nov. 2021 & 2020
National **First Prize**, Individual Award (***Twice***)	
Interdisciplinary Contest In Modeling(ICM)	May 2021
Honorable Mention, Team Award (***Team leader***)	
National Student Statistical Analysis of Data Competition	Jul. 2023
National Second Prize, Team Award (***Team leader***)	
"HuaWei Cup" China Post-Graduate Mathematical Contest in Modeling	Dec. 2023
National Third Prize, Team Award	
China Undergraduate Mathematical Contest in Modeling(CUMCM)	Sep. 2019
Shaanxi Province First Prize, Team Award (***Team leader***)	
National Graduate Student Electronic Design Competition	Jul. 2023
Northwestern Regional First Prize, Team Award	
Shaanxi Higher Mathematics Competition for College Students	Oct. 2019
Shaanxi Province First Prize, Individual Award	

PROJECTS

The Key R&D Projects in Shaanxi Province (No. 2022GY-089)	*Sep. 2022 – Present*
• *Multimodal Recognition; Situational Awareness*	(Student Leader)
The Natural Science Basic Research Program of Shaanxi (No. 2022JQ-593)	*Jun. 2022 – Jan. 2024*
• *Reinforcement Learning; Intelligent Decision Making*	(Project Participants)
The Shaanxi Provincial Sports Scientific Research Project (No. 2021382)	*Sep. 2021 – Sep. 2022*
• *Monitoring Systems; Big Data Analysis*	(Student Leader)
Postgraduate Innovation and Practice Fund Project (No. 06080-24GH01020101)	*Apr. 2024 – Present*
• *Pattern Recognition; Effectiveness Evaluation*	(Project Leader)

SKILLS

Programming Languages: MATLAB, Python, C

Drawing Software: MATLAB, Python(matplotlib), Origin, Visio

Machine Learning Algorithms: SVM (Support Vector Machine), Random Forest, LSTM (Long Short Term Memory Network), Neural Network, Reinforcement Learning

EXPERIENCE

Academic Expeditions:
- 2023 Future AI Masters and Global IT Training Camp (First Place in Course Grades)
- Northwest University of Technology Summer Camp (Excellent Camper)

Programming Skills:
- Served as a teaching assistant in "MATLAB programming and application" courses
- Writing the textbook "MATLAB Programming and Application" ISBN:9787121449376

Planning Capability:
- Leadership in multiple competitions and projects leading teams to achieve assignments
- Division of research tasks into sub-tasks in scientific research according to systems engineering thinking.