

## Shan Gao

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### Research interest

Human Factors; Human-Computer Interaction; Safety Engineering; Trust in Autonomy; Ergonomics; Human-Centered Design; Ageing; Flight Training; Accident Analysis; Psychophysiology; Aviation Psychology; Individual Differences; Decision-making; Risk-Taking Behavior

### Education

2022.4 – 2026.6	College of Safety Science and Engineering	Civil Aviation University of China	Ph.D. student
2018.9 – 2021.6	College of Safety Science and Engineering	Civil Aviation University of China	Master student
2014.9 – 2018.6	College of Safety Science and Engineering	Taiyuan University of Technology	Undergraduate

### Project

2024-2026	Fundamental Research Funds for the Central Universities	3122024026	<b>Principal</b>
2023-2024	Tianjin Graduate Research and Innovation Project	2022BKY150	<b>Principal</b>
2021-2024	National Natural Science Foundation of China	32071063	Participant
2019-2020	Tianjin Graduate Research and Innovation Project	2019YJSS068	<b>Principal</b>
2018-2020	National Natural Science Foundation of China	U1733117	Participant

### Publication

- [1]. **Gao, S.**, Lu, Z., Luan, H., Yin, M., & Wang, L. (2024). AI pilot in the cockpit: An investigation of public acceptance. *International Journal of Human-Computer Interaction*, 1-14.
- [2]. **Gao, S.**, & Wang, L. (2024). How flight experience impacts pilots' decision-making and visual scanning pattern in low-visibility approaches: Preliminary evidence from eye-tracking. *Ergonomics*, 1-14.
- [3]. Wang, L., **Gao, S.**, Hong, R. & Jiang Y. (2023). Effects of age and flight exposure on flight safety performance: Evidence from a large cross-sectional pilot sample. *Safety Science*, 165, 106199.
- [4]. **Gao, S.**, & Wang, L. (2023). More experience might not bring more safety: Negative moderating effect of pilots' flight experience on their safety performance. *International Journal of Industrial Ergonomics*, 95, 103430.
- [5]. Wang, L., **Gao, S.**, Tan, W., & Zhang, J. (2023). Pilots' mental workload variation when taking a risk in a flight scenario: a study based on flight simulator experiments. *International Journal of Occupational Safety and Ergonomics*, 29(1), 366-375.
- [6]. Zhai, S., **Gao, S.**, Wang, L., & Liu, P. (2023). When both human and machine drivers make mistakes: Whom to blame?. *Transportation Research Part A: Policy and Practice*, 170, 103637.
- [7]. **Gao, S.**, Xian, Y. and Wang, L. (2023). An evaluation framework on pilot's competency-based flying style. In the 25th International Conference on Human-Computer Interaction, Copenhagen, Denmark, pp. 190-199.
- [8]. **Gao, S.**, & Wang, L. (2020). Effects of mental workload and risk perception on pilots' safety performance in adverse weather contexts. In: *International Conference on Human-Computer Interaction*, Copenhagen, Denmark, pp. 278-291.
- [9]. Wang, L. & **Gao, S.** (2020). Study on eye movement and physiological characteristics of flying risk-taking behaviors. *China Safety Science Journal*, 30(09): 22-28.
- [10]. Wang, L. & **Gao, S.** (2021). Research on evaluation of exceedance behaviors of airline transport pilots based on QAR data. *Journal of Safety and Environment*, 30(09): 22-28.

## Conference

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- [1]. HCII 2023, the 25nd International Conference on Human-Computer Interaction, Copenhagen, Danmark, 22-28, July 2023. (Oral)
- [2]. HCII 2020, the 22nd International Conference on Human-Computer Interaction, held virtually from 19-24, July 2020. (Oral)
- [3]. The 4th COMAC International Technological Innovative Week, Shanghai, 2020.9.21-2020.9.25. (Poster)
- [4]. The 9th Annual Meeting of the Risk Analysis of China Disaster Defense Association, Tianjin, 2020.10.24-2020.10.25. (Oral)

## Professional experience

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**Research Assistant, Center for Psychological Sciences** 2021-2022

PI: Prof. Peng Liu, Zhejiang University

Project 1: Responsibility Attribution in Human-Computer Interaction

Project 2: Trust in Automation

Project 3: Emerging Technology Acceptance

**Research Intern, Okair Airline – Civil Aviation University of China simulator center** 2019

Project: Flight Operations and Experiment Design

## Professional service

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Reviewer Safety Science 2021 - Present

*Updated: 22/1/2024*