

# Wenwu GONG *PhD Candidate*

---

RESEARCH KEYWORDS

- ❑ **Tucker-based Low-rank Model**
- ❑ **Machine Learning**
- ❑ Spatial-temporal Data Modeling

- ❑ **Tensor Learning**
- ❑ **Scientific Computing**
- ❑ Image Processing

CONTACT INFORMATION

✉ 12031299@mail.sustech.edu.cn

🏠 <https://gongwenwu.github.io/>

🐙 [github.com/GongWenwu](https://github.com/GongWenwu)

🔍 Google Scholar 📄 39 Citations

Ph.D  
HomePage

BIOGRAPHY

I plan to do a visiting postgraduate internship (MATH) at HKUST in Oct. 2023. In the Summer of 2024, I will finish my Ph.D. from Southern University of Science and Technology (SUSTech), where my research focuses on **Tensor Learning** and **Scientific Computing**.

OPEN-SOURCE HIGHLIGHTS

**Open-source Contribution:** I am leading an open-source project named **LRTL Methods Applications**.

🔗 LRTL

EDUCATION

🏛️ **Southern University of Science and Technology** Shenzhen  
🎓 *Ph.D. in Mathematics* Sep. 2020 - Present.

- **Affiliation:** Department of Statistics and Data Science
- **Thesis:** Low-Rank Tensor Learning: Methods, Algorithms, and Applications

🏛️ **Harbin Institute of Technology** Shenzhen  
🎓 *Master of Science in Mathematics* Sep. 2018 - Sep. 2020

- **Affiliation:** School of Mathematics
- **Minor:** Probability and Statistics

🏛️ **Nanchang University** Nanchang  
🎓 *Bachelor of Science in Mathematics* Sep. 2014 - May. 2018

- **Affiliation:** School of Mathematics and Computer Sciences
- **Minor:** Applied Mathematics

HONOURS AND AWARDS

🏆 International Training Program of Guangdong Province	RMB 18,000	June 2023
Innovative Practice Scholarship	RMB 10,000	May 2021
National Postgraduate Statistical Modeling Competition	Second Prize	Dec. 2020
🏆 Innovative Practice Fund of SUSTech	RMB 82,000	Sep. 2020

PUBLICATIONS

🔍 SCHOLAR

**Preprints & Under Review**

2. Wenwu Gong, Zhejun Huang, Lili Yang (2023). **Enhanced low-rank and sparse Tucker decomposition for image inpainting**. Under review
1. Wenwu Gong, Zhejun Huang, Lili Yang (2023). **Manifold regularized Tucker decomposition approach for spatiotemporal traffic data imputation**. arXiv:2305.06563

## Journal Papers

1. Wenwu Gong, Zhejun Huang, Lili Yang (2023). **Accurate regularized Tucker decomposition for image restoration**. *Applied Mathematical Modeling*. 123 (11): 75-86.  
**JCR-Q1 IF: 5** <https://doi.org/10.1016/j.apm.2023.06.031>

### Conference Papers

1. **ITSC 2023:** Wenwu Gong, Zhejun Huang, Lili Yang (2023). **LSPTD: Low-rank and spatiotemporal priors enhanced Tucker decomposition for internet traffic data imputation** (presentation only). *2023 IEEE Conference on Intelligent Transportation Systems*

### Other Papers

2. Wenwu Gong, Jie Jiang, and Lili Yang. (2022). **Dynamic Risk Assessment of Compound Hazards Based on VFS-IEM-IDM: A Case Study of Typhoon-Rainstorm Hazards in Shenzhen, China.** *Nat. Hazards Earth Syst. Sci.* 22(10): 3271-3283.  
**JCR-Q1 IF: 4.6** <https://doi.org/10.5194/nhess-22-3271-2022>
1. Fanyu Meng, Wenwu Gong, Jun Liang, Xian Li, Yiping Zeng and Lili Yang. (2021). **Impact of different control policies for COVID-19 outbreak on the air transportation industry: A comparison between China, the U.S. and Singapore.** *PLoS One.* 16(3): e0248361.  
**JCR-Q2 IF: 3.7** [10.1371/journal.pone.0248361](https://doi.org/10.1371/journal.pone.0248361)