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## Chinese Name

宋俊

## Qualifications

Geography, PhD, Civil & Environmental Engineering, Imperial College London  
1 Sept 2017 → 1 Aug 2021  
Award Date: 1 Aug 2021

## Employment

### Research Assistant Professor

Academy of Geography, Sociology and International Studies  
Hong Kong Baptist University  
3 Oct 2022 → present

## Research outputs

**Towards space-time modelling of PM<sub>2.5</sub> inhalation volume with ST-exposure**  
Song, J., 20 Oct 2024, In: Science of the Total Environment. 948, 174888.

### Vehicle-Based Machine Vision Approaches in Intelligent Connected System

Ma, C., Song, J., Xu, Y., Fan, H., Wu, X. & Sun, T., Mar 2024, In: IEEE Transactions on Intelligent Transportation Systems. 25, 3, p. 2827-2836 10 p.

### Reducing environment exposure to COVID-19 by IoT sensing and computing with deep learning

Ma, C., Song, J., Xu, Y., Fan, H., Liu, X., Wu, X., Luo, Y., Sun, T. & Xie, J., Dec 2023, In: Neural Computing and Applications. 35, 36, p. 25097-25106 10 p.

### ST-Bikes: Predicting Travel-Behaviors of Sharing-Bikes Exploiting Urban Big Data

Chai, J., Song, J., Fan, H., Xu, Y., Zhang, L., Guo, B. & Xu, Y., Jul 2023, In: IEEE Transactions on Intelligent Transportation Systems. 24, 7, p. 7676-7686 11 p.

### Where to place methane monitoring sites in China to better assist carbon management

Zhang, X., Zhou, C., Zhang, Y., Lu, X., Xiao, X., Wang, F., Song, J., Guo, Y., Leung, K. K. M., Cao, J. & Gao, M., 21 Apr 2023, In: npj Climate and Atmospheric Science. 6, 8 p., 32.

### Toward High-Performance Map-Recovery of Air Pollution Using Machine Learning

Song, J., Fan, H., Gao, M., Xu, Y., Ran, M., Liu, X. & Guo, Y-K., 13 Jan 2023, In: ACS ES&T Engineering. 3, 1, p. 73-85 13 p.

### CA-STD: Scene Text Detection in Arbitrary Shape Based on Conditional Attention

Wu, X., Qi, Y., Song, J., Yao, J., Wang, Y., Liu, Y., Han, Y. & Qian, Q., 1 Dec 2022, In: Information. 13, 12, 14 p., 565.

### Enhancing the Applicability of Satellite Remote Sensing for PM<sub>2.5</sub> Estimation Using Machine Learning Models in China

Chai, J., Song, J., Xu, Y., Zhang, L. & Guo, B., 27 Sept 2022, In: Journal of Sensors. 2022, 8 p., 7148682.

### A novel multi-pollutant space-time learning network for air pollution inference

Song, J. & Stettler, M. E. J., 10 Mar 2022, In: Science of the Total Environment. 811, 152254.

**Deep-MAPS: Machine-Learning-Based Mobile Air Pollution Sensing**

Song, J., Han, K. & Stettler, M. E. J., 1 May 2021, In: IEEE Internet of Things Journal. 8, 9, p. 7649-7660 12 p.

**Research on Visible Sensing Recognition Linkage Model & Decision Support System for PM 2.5 Distribution in Road Network: A Case Study of Chengdu Area**

Song, J., Chaozhe, J., Han, K., Quan, S. & Fu, L., 8 Jan 2017.

**The Bus Line Supporting System Based on Learning Neural Network Model Applied In GIS**

Song, J. & Quan, S., Feb 2016, *Proceedings of the 2015 5th International Conference on Computer Sciences and Automation Engineering*. Atlantis Press, p. 11-14 4 p. (Advances in Computer Science Research).

**Analysis of Model of Community Sports Logistics Distribution Center Location under Electronic Commerce**

Xu, F., Song, J., Yuan, J. & Jiang, C., 19 Oct 2013, *ICTE 2013*. Peng, Q. & Wang, K. (eds.). American Society of Civil Engineers (ASCE)

**Planning of Dynamic Routing of Logistics in Urban Public Sports Facilities Based on MAS**

Yuan, J., Song, J., Zhang, Y., Jiang, C. & Xu, F., 19 Oct 2013, *ICTE 2013*. Peng, Q. & Wang, K. (eds.). American Society of Civil Engineers (ASCE)

**Prizes**

**China Youth Entrepreneurship Award**

SONG, Jun (Recipient), 2017