



## 个人简介

张俊飞，男，副教授，硕士生导师

所在系、所：智能建造系

电子邮箱：[junfeizhang@hebut.edu.cn](mailto:junfeizhang@hebut.edu.cn)

办公电话：15201451690

## 主要研究方向

智能建造与数字孪生，大数据与人工智能，建筑材料

## 主要学历与学术经历

2010/09-2014/06 北京科技大学 学士

2014/09-2017/01 北京科技大学 硕士

2017/10-2021/04 澳大利亚西澳大学 博士

2021/06-至今 河北工业大学 副教授

## 讲授课程

本科生课程：工程大数据及应用、建筑智能运维与管理

研究生课程：工程大数据及应用

## 主要学术兼职

多次担任 SCI 期刊客座编委，长期担任国际主流 SCI 期刊审稿人

## 主要学术成就、奖励及荣誉

[1] 奖励名称. 河北工业大学元光学者, 2021 年 6 月。

## 主要科研项目

[1] 国家自然科学基金项目. 高性能 ECC 基因结构人工智能优化研究, 2021-01 至 2024-12 (项目参与人)

## 代表性论文

1. **Junfei Zhang, Yimiao Huang, Guowei Ma, Yanmei Yuan, Brett Nener.** Automating the mixture design of lightweight foamed concrete using multi-objective firefly algorithm and support vector regression [J]. *Cement and Concrete Composites*, 121, 2021:104103;
2. **Junfei Zhang, Yimiao Huang, Guowei Ma, Brett Nener.** Mixture optimization for environmental, economical and mechanical objectives in silica fume concrete: A novel frame-work based on machine learning and a new meta-heuristic algorithm [J]. *Resources, Conservation & Recycling*, 167, 2021:105395;
3. **Junfei Zhang, Yimiao Huang, Farhad Aslani, Guowei Ma, Brett Nener.** A hybrid intelligent system for designing optimal proportions of recycled aggregate concrete [J]. *Journal of Cleaner Production*, 273, 2020:122922;
4. **Junfei Zhang, Yimiao Huang, Yuhang Wang, Guowei Ma.** Multi-objective optimization of concrete mixture proportions using machine learning and metaheuristic algorithms. *Construction and Building Materials*, 253, 2020: 119208;

5. **Junfei Zhang**, Yimiao Huang, Guowei Ma, Junbo Sun, Brett Nener. A metaheuristic-optimized multi-output model for predicting multiple properties of pervious concrete, *Construction and Building Materials*, 249, 2020: 118803;
6. **Junfei Zhang**, Guowei Ma, Yimiao Huang, Junbo Sun, Farhad Aslani, Brett Nener. Modelling uniaxial compressive strength of lightweight self-compacting concrete using random forest regression[J]. *Construction and Building Materials*, 210: 713-719, 2019;
7. Yuantian Sun, **Junfei Zhang**\*, Guichen Li, Guowei Ma, Yimiao Huang, Junbo Sun, Yuhang Wang, Brett Nener. Determination of Young's modulus of jet grouted coalcretes using an intelligent model. *Engineering geology*, 252: 43-53, 2019;
8. Junbo Sun, **Junfei Zhang**\*, Yunfan Gu, Yimiao Huang, Sun Yuantian, Guowei Ma. Prediction of permeability and unconfined compressive strength of pervious concrete using evolved support vector regression. *Construction and Building Materials*, 20: 440-4497, 2019;
9. Yimiao Huang, **Junfei Zhang**\*, Yuhang Wang, Guowei Ma. Intelligent Mixture Design of Steel Fibre Reinforced Concrete Using Support Vector Regression and Firefly Algorithm based Multi-Objective Optimization Model. *Construction and Building Materials*, 253, 2020: 119208;
10. Yuantian Sun, **Junfei Zhang**\*, Guichen Li, Yuhang Wang, Junbo Sun, and Chao Jiang. Optimized neural network using beetle antennae search for predicting the unconfined compressive strength of jet grouting coalcretes. *International Journal for Numerical and Analytical Methods in Geomechanics*, 43(4): 801-813, 2019.

## 出版著作

- [1] 黄轶群、陆长松、张瀑、张慧峰、梅晓彬、黄轶淼、王里、张俊飞等. 钢筋制品智能化加工技术. 北京, 中国建筑工业出版社, 2021