导师简介

<table>
<tr><td>姓名</td><td>臧全胜</td><td>性别</td><td>男</td><td>出生年月</td><td>1988 年 4 月</td><td rowspan="3">  </td></tr>
<tr><td>职称</td><td>讲师/硕导</td><td>民族</td><td>汉</td><td>籍　贯</td><td>河南开封</td></tr>
<tr><td>电子邮箱</td><td colspan="2">qszang1991@zzu.edu.cn</td><td colspan="2">最终学位</td><td>工学博士</td></tr>
<tr><td>研究方向</td><td colspan="6">1. 交通、水利基础设施灾变机理与安全防护
2. 岩土工程及水工结构高性能数值仿真</td></tr>
<tr><td>主要学习科研和工作经历</td><td colspan="6">一、教育经历
2017.09-2023.06，大连理工大学，建设工程学部，结构工程专业，博士
2021.06-2022.06，University of Luxembourg，Faculty of Science, Technology and Medicine，联合培养博士
2014.09-2017.06，郑州大学，水利与环境学院，道路与铁道工程，硕士（推免）
2010.09-2014.06，郑州大学，水利与环境学院，道路桥梁与渡河工程，本科
二、工作经历
2023.07-至今，郑州大学，水利与交通学院，讲师
2024.01-至今，郑州大学，水利工程流动站，博士后</td></tr>
<tr><td>代表性科研成果</td><td colspan="6">一、代表性奖励
(1) 2025.08，高速公路隐蔽病害非开挖精细化诊治技术，河南省交通运输科学技术进步奖特等奖（18/25）
(2) 2025.01，大连理工大学优秀博士学位论文
(3) 2024.10，郑州大学优秀班主任
(4) 2022.05，辽宁省优秀毕业生
(5) 2020.12，博士研究生国家奖学金
(6) 2020.08，国家建设高水平大学公派研究生项目奖学金
二、代表性科研项目
（1）中国博士后科学基金面上项目，多因素耦合作用下渡槽液体-结构-地基系统动力响应机理与精细化模拟研究，2025.08-2027.07，在研，主持
（2）河南省科技攻关项目，隔热阻渗新型地下仓结构技术研究，2024.01-2025.12，结题，主持
（3）河南省科技攻关项目，基于多场耦合的大型渡槽非线性动力特性精细化仿真技术研究，2026.01-2027.12，在研，主持
（4）国家重点实验室开放基金课题，深部隧道围岩热-水-力耦合模型及裂隙扩展机制研究，2026.02-2029.02，在研，主持
（5）河南省高等学校重点科研项目，地下仓储隔热防渗及抗震韧性提升关键技术研</td></tr>
</table>

究，2025.01-2026.12，在研，主持

（6）央企（世界 500 强）横向课题，基于多场耦合的地下仓式结构隔热阻渗性能研究，2025.04-2026.04，在研，主持

三、代表性论文（部分）*代表通讯作者

[1] **Quansheng Zang**, Yunmu Zhou, Kunpeng Yuan, Ranran Li, Changyi Yu, Yurong Zhang, Yanhui Pan, Yongli Chen, Fixed-mesh isogeometric analysis for phreatic surface reconstruction in 2d steady-state seepage flow. Computers and Geotechnics, 2026, 190, 107762.

[2] **Quansheng Zang**, Yanhui Zhong, Wenbin Ye, Jun Liu, Bin Li, Fan Yang, Songtao Li, A NURBS-Enhanced semi-analytical method for nonlinear liquid sloshing analysis in liquid storage structures with various baffles. Engineering Analysis with Boundary Elements, 2025, 173, 106155.

[3] **Quansheng Zang**, Hao Hong, Jun Liu, Yanhui Zhong, Bei Zhang, Bin Li, Lei Gan, Isogeometric boundary element analysis of nonlinear liquid sloshing in containers under pitching oscillation. International Journal of Engineering Science, 2025, 217, 104371.

[4] **Quansheng Zang**, Bei Zhang, Yanhui Zhong, Jun Liu, Hao Hong, Bin Li, Long Yu, Nonlinear analysis of liquid sloshing in containers under pitching load with scaled boundary finite element method. Computers & Structures, 2025, 315, 107791.

[5] **Quansheng Zang**, Jun Liu, Zhang B, Lei Qin, Wen-Bin Ye, Stéphane P. A. Bordas. Semi-analytical analysis of nonlinear liquid sloshing in rectangular tanks with scaled boundary finite element method[J]. Physics of Fluids, 2024, 36(7).

[6] **Quansheng Zang**, Chintan Jansari, Stéphane P. A. Bordas, Jun Liu. Trimming with polygonal scaled boundary isogeometric method[J]. Computers & Structures, 2024, 295: 107270.

[7] **Quansheng Zang**, Jun Liu, Wenbin Ye, Gao Lin. Isogeometric boundary element method for axisymmetric steady-state heat transfer[J]. Engineering Analysis with Boundary Elements, 2024, 160: 89-105.

[8] **Quansheng Zang**, Stéphane P. A. Bordas, Jun Liu, Sundararajan Natarajan. NURBS-Enhanced polygonal scaled boundary finite element method for heat diffusion in anisotropic media with internal heat sources[J]. Engineering Analysis with Boundary Elements, 2023, 148: 279-292.

[9] **Quansheng Zang**, Jun Liu, Wenbin Ye, Fan Yang, Gao Lin. A novel isogeometric scaled boundary finite element method for bending and free vibration analyses of laminated plates with rectilinear and curvilinear fibers constrained or free from

elastic foundations[J]. Engineering Analysis with Boundary Elements, 2023, 154: 197-222.

[10] **Quansheng Zang**, Jun Liu, Wenbin Ye, Fan Yang, Rui Pang, Gao Lin. High-performance bending and buckling analyses of cylindrical shells resting on elastic foundation using isogeometric scaled boundary finite element method[J]. European Journal of Mechanics-A/Solids, 2023, 100: 105013.

[11] **Quansheng Zang**, Jun Liu, Wenbin Ye, Fan Yang, Congkuan Hao, Gao Lin. Static and free vibration analyses of functionally graded plates based on an isogeometric scaled boundary finite element method[J]. Composite Structures, 2022, 288: 115398.

[12] **Quansheng Zang**, Jun Liu, Wenbin Ye, Hangduo Gao, Gao Lin. Plate-bending analysis by NURBS-based scaled boundary finite-element method[J]. ASCE-Journal of Engineering Mechanics, 2021, 147(9).

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[14] **Quansheng Zang**, Jun Liu, Yang Zhou, Gao Lin. On investigation of liquid sloshing in cylindrical tanks with single and multiply connected domains using isogeometric boundary element method [J]. Journal of Pressure Vessel Technology, 2021,143(2).

[15] **Quansheng Zang**, Jun Liu, Wenbin Ye, Gao Lin. Isogeometric boundary element for analyzing steady-state heat conduction problems under spatially varying conductivity and internal heat source[J]. Computers & Mathematics with Applications, 2020, 80(7), 1767-1792.

[16] **Quansheng Zang**, Jun Liu, Lu Lu, Gao Lin. A NURBS-based isogeometric boundary element method for analysis of liquid sloshing in axisymmetric tanks with various porous baffles[J]. European Journal of Mechanics-B/Fluids, 2020,81:129-150.

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Wang**. Static and vibration analyses of laminated conical shells under various boundary conditions using a modified scaled boundary finite element method[J]. Computers & Mathematics with Applications, 2025,177:147-166.

[21] Ke Zhao, Jun Liu, **Quansheng Zang***, Lei Gan, Jie Ren, Zhi Liu, Lei Xiong, Hao Gu, Wenbin Ye, Boundary element analysis of liquid sloshing in a three-dimensional liquid tank with porous structure. European Journal of Mechanics - B/Fluids, 2025, 204286.

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[24] Wei Yu, Jun Liu, Haibo Wang, Lei Qin, Lei Gan, **Quansheng Zang***, Wenbin Ye**, An implicit coupled method of scaled boundary finite element and peridynamics for fracture analysis. Finite Elements in Analysis and Design, 2025, 252, 104453.

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[29] Wenyuan Wang, **Quansheng Zang***, Zhijun Wei, Zijian Guo. An isogeometric boundary element method for liquid sloshing in the horizontal eccentric annular tanks with multiple porous baffles[J]. Ocean Engineering, 2019,189:106367.

四、代表性授权专利

发明专利：

[1] **臧全胜**；牛永定；张蓓；钟燕辉；李晓龙；刘俊；叶文斌；刘小锋；一种带格栅的

	椭球形储液装置及其力学特性仿真方法, 2026, 中国, ZL202311390515.2 [2] **臧全胜**; 林皋; 刘俊; 叶文斌; 一种带双层圆筒形格栅的储液罐及其受力计算方法，2023, 中国, ZL201810022037.2 [3] 刘俊; **臧全胜**; 林皋; 叶文斌; 一种圆环柱形防波结构及其数值计算方法，2020, 中国, ZL201910278827.1 [4] 刘俊; **臧全胜**; 林皋; 叶文斌; 一种带填充圆柱消能结构的储液箱及其数值计算方法，2020, 中国, ZL201910278583.7 [5] 刘俊; **臧全胜**; 林皋; 叶文斌; 带圆环柱形消能层的有中心柱型储液罐及其受力计算方法，2020, 中国, ZL201910278552.1 [6] 刘俊; **臧全胜**; 林皋; 叶文斌; 一种外接圆筒形格栅的圆环柱形防波堤及其数值计算方法，2020, 中国, ZL201910278777.7 [7] 叶文斌; 林皋; 刘俊; **臧全胜**; 一种带圆弧形格栅的储液罐及其受力计算方法, 2023, 中国, ZL201810022048.0 **实用新型专利：** [1] **臧全胜**; 刘小锋; 钟燕辉; 张蓓; 李晓龙; 刘俊; 牛永定; 许胜捷; 一种模拟道路沉陷病害的装置, 2024, 中国, ZL202322868779.6 [2] **臧全胜**;赖灿华，周健，刘明硕，张振; 一种筏式排水管道检测设备防倾覆装置, 2025, 中国, ZL202422173790.5 [3] 方宏远, **臧全胜**; 李健; 陈延坡; 李松涛; 李斌; 杨曼; 曹凯; 一种船式排水管道检测设备, 2016, 中国, ZL201620635614.1 [4] 方宏远, **臧全胜**; 李健; 陈延坡; 李松涛; 李斌; 杨曼; 曹凯; 一种排水管道检测滑轮撑线架, 2016, 中国, ZL201620636036.3 [5] 方宏远; **臧全胜**; 刘亮光; 张蓓; 钟燕辉; 李晓龙; 郭成超; 李嘉; 一种可缓冲的探地雷达天线固定装置, 2015, 中国, ZL201520306385.4 [6] 方宏远; **臧全胜**; 刘亮光; 张蓓; 钟燕辉; 李晓龙; 郭成超; 李嘉; 一种刚性路面路基病害模型探测试验装置, 2015, 中国, ZL201520306919.3 **五、地方标准** 道路深层病害高聚物注浆处治技术规范, DB41/T 2877—2025, 18/32. **六、会议报告** [1] **Quansheng Zang**. Study on Refined Numerical Simulation Methods for Fluid Thermal-Solid Multiphysics Coupling Based on Non-Uniform Rational B-Splines. The 10th International Conference on Hydraulic and Civil Engineering & Engineering Safety and Disaster Prevention Forum，Zhengzhou, China, Aug 9, 2024. (Reporter)