Jiabao Zhai

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Education

Tongji University

Bachelor of Engineering in Civil Engineering (Expected Graduation: 2025)

GPA: 90.41/100 | Ranking: 5/103

Relevant Courses: Material Mechanics, C++ Program Design, Structural Mechanics, Fluid Mechanics, Theory

of Elasticity

Research Experience

State Key Laboratory of Disaster Reduction in Civil Engineering, Tongji University

- Preparation of Green High-performance Engineered Geopolymer Composite

Aug 2023 - Present

- Prepared specimens and conducted experiments on engineered geopolymers incorporating recycled brick powder.
- Analyzed experimental data and contributed to research publications.
- Design-Driven Approach for Low Fiber Content Engineered Geopolymer Composite

Oct 2023 - Present

Developed and tested new engineered geopolymer composites with extremely low fiber content.

- Measurement of Self-Weight in Existing Buildings

Feb 2023 - Jun 2023

- Measured and collected dynamic characteristics of buildings at Siping Road Campus, Tongji University.
- Vibration Characteristics in Bicycles with Pneumatic Tires**

Dec 2021 - Mar 2023

• Conducted vibration experiments on bicycles and analyzed data using the FFT method.

Publications

- 1. F. Wang, **J. Zhai**, Y. Ding, T. Nishiwaki, J. Yu, V.C. Li, and K. Yu. "Design-Driven Approach for Engineered Geopolymer Composite with Extremely Low Fiber Content," Composites Part B: Engineering (submitted)
- 2. **J. Zhai**, F. Wang, and K. Yu. "Preparation of green high-strength and high-ductility engineered geopolymer composite incorporating large volumes of recycled brick powder" (not submitted)
- 3. J. Chen, Y. Li, P. Wang, and **J. Zhai**. "Research on the method of measuring the self-weight of existing buildings," Journal of Vibration Engineering (Chinese Journal) (submitted)

Honors and Awards

- School Scholarship, 2021-2022, 2022-2023
- Excellent Student Award, 2021-2022, 2022-2023

Languages

Chinese (native), English (fluent, TOEFL score: 99)