





Jia GUO (郭佳)

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Address: Katsura campus, C1-3-391, Kyoto University, Kyoto Japan, 610-1141

Education

Ph.D. in Architectural Engineering (expected)Kyoto University2016.10-2019.09Master in Civil Engineering, Top 5 in 50 graduatesTsinghua University2009.08-2012.06Bachelor in Civil Engineering, Top 14 in 90 undergraduatesTsinghua University2005.08-2009.08

Previous Appointments

Associate Researcher Research Institute of Highway, Ministry of Transport, China 2012.07-2016.09

Awards

Japanese Government Scholarship (University-nominated), Monbukagakusho (MEXT), 2016 – 2019

First Prize of the Science and Technology Award of China Highway & Transportation Society (CHTS), 2017

Grand Prize of the Science and Technology Award of China Highway & Transportation Society (CHTS), 2015

Tsinghua University Outstanding Master's Thesis, only two in Department of Civil Engineering, 2012

Best Paper Award, the 20th National Conference on Structural Engineering, Ningbo, China. Nov 2011

Excellent Teaching Assistant in Structural Mechanics I, II, 2011

Academic Excellence Scholarship of Tsinghua University, 2006, 2007, 2008, 2010, 2011

First Prize of 13th "Tsinghua-Golden Gazelle Cup" Structure Design Competition, Professional group, 2007

Research Areas

Advanced signal processing and vision-based techniques to structural dynamics (Present)

Finite element modeling, modal testing, model updating, and structural damage detection (Ph.D.)

Structural Health Monitoring of large-scale bridges (Research Institute of Highway)

Earthquake engineering (Master)

List of Major Publications (2017-present)

- [1] **Guo J**, Wang L, Takewaki I. Frequency response-based damage identification in frames by minimum constitutive relation error and sparse regularization. *Journal of Sound and Vibration*, 443: 270-292, 2019.
- [2] **Guo J**, Wang L, Takewaki I. Modal-based structural damage identification by minimum constitutive relation error and sparse regularization. *Structural Control and Health Monitoring*, 25(12): e2255, 2018.
- [3] **Guo J**, Wang L, Takewaki I. Static damage identification in beams by minimum constitutive relation error. *Inverse Problems in Science and Engineering*: 1-25, 2018.
- [4] **Guo**, **J**., Deng, K., He, M., Zhao, C., & Li, W. Experimental study on the construction stages of an RC closure pour in bridge widening. Journal of Bridge Engineering, 22(12): 06017007, 2017.
- [5] **Jia Guo**, Jiao Jian, Kohei Fujita, and Izuru Takewaki, Vision-based damage identification of full-field vibration modes from high-speed camera. *Engineering Structures*, 2019 (in review).
- [6] **Jia Guo**, Jiao Jian, Kohei Fujita, and Izuru Takewaki, A spectrum-driven damage identification by minimum constitutive relation error. *Mechanical Systems and Signal Processing*, 2018 (in review).
- [7] **Guo J**, Deng K, Takewaki I. Physical-based parametrization and identification for frame-type structures using response sensitivity approach in time domain. *Structural Control and Health Monitoring*, 2018 (in review).
- [8] **Guo J,** Wang L, Takewaki I. Comparative study of damage identification algorithms using sensitivity approach on experiment frame structures. *Computers & Structures*, 2019 (in review).