

Zhiyi Tang

Ph.D. student, HIT

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Research Interests

Structural Health Monitoring, Signal Processing, Machine Learning, Optimization

Education

Harbin Institute of Technology Ph.D., Engineering Mechanics - Advisor: Yuequan Bao	Harbin, China	Sep 2016 –
Harbin Institute of Technology M.S., Civil Engineering - Thesis: Blind Source Separation of Bridge Multi-Vibration - Advisor: Hui Li	Harbin, China	Sep 2014 – July 2016
Harbin Institute of Technology B.S., Theoretical and Applied Mechanics - Thesis: Long-Span Bridge Aerodynamic Damping Analysis - Advisor: Hui Li	Harbin, China	Sep 2009 – July 2013

Journal Publications

- Bao Yuequan, Tang Zhiyi, Li Hui. "Compressive-Sensing Data Reconstruction for Structural Health Monitoring: A Machine-Learning Approach". *Structural Health Monitoring*. Under review.
- Tang Zhiyi, Chen Zhicheng, Bao Yuequan and Li Hui. "Convolutional neural network-based data anomaly detection method using multiple information for structural health monitoring". *Structural Control and Health Monitoring* (SCHM). 2018. In publication.
- Bao Yuequan, Tang Zhiyi, Li Hui and Zhang Yufeng. "Computer vision and deep learning-based data anomaly detection method for structural health monitoring". *Structural Health Monitoring* (SHM). 2018.

Work Experience

Asia-Pacific-Euro Summer School (APESS) on Smart Structures Technology Volunteer - Curriculum Planning, Daily Life Support, Final Group Project TA (https://github.com/dawnnao/APESS2018_Steel_Girder_Crack_ID_dataset) - Manager: Hui Li	Qingdao & Harbin, China	16 July – 5 Aug 2018
Tibetan Traditional Medical College Volunteer Teacher - English Teaching, Non-Profit Public Service Activities - Manager: Tsering	Lhasa, China	Aug 2013 – July 2014

Teaching Experience

Harbin Institute of Technology

Harbin, China

Sep 2016 – Nov 2016

Teaching Assistant

- Developed course material and assignments for structural health monitoring of civil infrastructure

- Instructors: Hui Li, Yuequan Bao

Award and Honors

Excellent paper of WTC 2018 (74 over 1829): "Artificial Intelligence-based Data Anomaly Detection Method for Structural Health Monitoring", Beijing 2018

Best Performance Award - 2nd Prize (8 groups) in APSS 2017, Yokohama 2017

JSTI co. Structural Health Monitoring Graduate Fellowship (3 over 200+ yearly) 2016

HIT Graduate Scholarship 2014 – 2016

Source of Love Scholarship for Volunteers 2014

HIT Best Thesis for Undergraduate (100 over 6,000+ yearly) 2013

Xianzi Zeng Scholarship for distinguished undergraduates 2010 – 2013

HIT Dong Liang Scholarship for top grades undergraduates 2010

Computer Skills

Python, TensorFlow, MATLAB, JavaScript, R, ANSYS, HTML, CSS, Linux, Mac

Academic service

Reviewer for *Structural Health Monitoring*