



Universiteit
Leiden
The Netherlands

Structural health monitoring meets data mining

Miao, S.

Citation

Miao, S. (2014, December 16). *Structural health monitoring meets data mining*. Retrieved from <https://hdl.handle.net/1887/30126>

Version: Corrected Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/30126>

Note: To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/30126> holds various files of this Leiden University dissertation

Author: Miao, Shengfa

Title: Structural health monitoring meets data mining

Issue Date: 2014-12-16

Acknowledgements

Many thanks to the following people:

My coworkers at LIACS (Leiden University): Joaquin Vanschoren, Siegfried Nijssen, Ugo Vespier, Ricardo Cachucho, Marvin Meeng, Wouter Duivesteijn, Jan van Rijn, Rob Konijn, Claudio Sá, Benjamin van der Burgh, Kleanthi Georgala, Harm de Vries, Michael Mampaey, Alberto Baggio, Ana Loureiro, and Geraldine Ribeiro.

My coworkers at LIAS (Leiden University): Hilde De Weerd, HouLeong Ho, Mingkin Chu, and Julius Morche.

Our partners in the Faculty of Civil Engineering and Geosciences, Delft University of Technology: Eddy Koenders, René Veerman, and Fred Schilperoort.

My coworkers at IDM, Lanzhou University (China): Xiaoyun Chen, Longjie Li, Junjun Cheng, Mingwei Leng, Yi Chen, Pengfei Chen, Xin Zhang, Min Yue, Yanshan He, Weiguo Song, Liangzhai Ma, Yukai Yao, Guohua Liu, Youli Su, Baojun Gao, Ping Wen, Sha Liu, Juan Zhao, Yangyang Liu, Qiaojin Xing, and Tao Chen.

My friends in the Netherlands: Di Liu and Yan Liu, Zhao Zhou and Yang Yang, Tao Ma, Fujun Gou, Xiaoli Lu, Wen Pan, Irene Martorelli, Narjis Sellam, Rui Li, Xiaohu Li and Changchun Song, Yuanyuan Zhao and Sipeng Zheng, Jiongwei Wang and Xiaoqun Yang, Shengnan, Zhao, Guiling Chen and Jiabao Yan, Hao Qiu, Zhongxiao Wang, Wen Liang, Rongfang Liu, Jun Wang and Jinfeng Shen, Yongyi Wang and Yanan Wang, Chunli Song and Min Cheng, Tao Peng and Yuanyuan Li, Gesterkamp Lennert and Yuan Li, Yinxuan Huang, Chengcheng

8. ACKNOWLEDGEMENTS

Li, Jianbin Jiang, Bo Chen, Zheng Guan, Jin Wang, Xiaolei Niu, Xingrong Ma, Jiayuan Li, Jiaqi Zhao, Zhiguo Zhou, Fuyu Cai, Song Wu, Lu Cao, Yuanhao, Guo, Yanming Guo, Zhiwei Yang, Kaifeng Yang, Zhan Xiong, Weidong Zhuang, Hao Wang, Yu Liu, Mohamed Tleis, Muhammad Fawad Khan, Mohd Hafeez Osman, Wei Wang, Bing Lu, Chengjie Xing, Jifeng Liu, Jianqiang Sun, Fei Liu, Kai Fang and Xiaofei Zhang, Juan Zhou and Botao Xin, Peng Ye, Hua Wang and Hua Zhu.

My friends in China: Xingchen Liu and Shuzhen Liu, Xin Liu and Cuihua Mi, Lili Jiang and Cong Hu, Shilin Huang, Buyu Wang, Gang Chen and Lijuan Su, Xiaowei Li, Hong Peng, Shouliang Li, Guidong Zhang, Xin Jin, Lin Wang, Jingzhi Zhang, Jun Li, Jing Su, Rong Ma, and Zhili Zhao.

My family: Dezhong Miao and Cuirong Yuan, Minghe Wang and Airong Xu. My wife Yuli Wang and my son Hangcheng Miao.

Thank you for being part of my PhD journey.

Curriculum Vitae

Shengfa Miao was born in Shanxian, Heze, Shandong, China on September 8, 1981. In 2001, he received his secondary school degree from the fifth Shanxian Middle School and started his bachelor study in Computer Science, at Lanzhou University, Lanzhou, Gansu, China. He received the bachelor degree in July 2005, and was awarded the title “Outstanding Graduate Student”. In the same year, he was employed by Lanzhou university as a teaching assistant. In September 2007, he was admitted by Lanzhou University as a master student in the major of Data Mining, under the supervision of Prof. Xiaoyun Chen. He graduated in June 2009 with a thesis entitled “The Application and Research of Data Warehouse and Search Engine in the Management of Alumni Resources”. Right after his graduation, he started his PhD research following Prof. Xiaoyun Chen.

In November 2010, he obtained a PhD position at Leiden Institute of Advanced Computer Science, Leiden University, the Netherlands, under the supervision of Prof. dr. J.N. Kok and dr. A.J. Knobbe. His research mainly focused on the InfraWatch project. The project aims to monitor structural health by installing a sensor network on a structure, specifically, a highway bridge, and extracting modal parameters from datasets collected with the sensor network. As being presented in this thesis, Data Mining plays a key role in the procedure of Structural Health Monitoring.

As of September 2014, Shengfa works as a research associate in Prof. dr. H.G.D.G. De Weerdt’s group, at Leiden University Institute for Area Studies, Leiden University, on a project entitled “Digging into Data: Automating Chinese Text Extraction”.