Liang Zhang

Location: University of Memphis

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SUMMARY

- Proficient and executive research assistant in educational data mining and artificial intelligence
- Good programmer using Java, R language and JavaScript
- Highly organized, efficient, and active in challenging and pressurized research task

RESEARCH EXPERIMENCE

Research Assistant **Aug. 2017 to Present**

Optimal Learning Lab

- Responsible for the plugging new version of component into Workflows in the DataShop/LearnSphere
- Test the feasibility of components and do the improvement

Institute for Intelligent System

- Study the information retrieval for intelligent education based on xAPI data
- Study the technical improvement of Intelligent Tutoring System

Graduate Assistant **Aug. 2015 to Feb. 2017**

Mechanical Acoustic Research Lab, Department of Mechanical Engineering, University of Memphis

- Damage signals testing for materials
- Signal analysis and data mining

Research Assistant **Feb. 2013 to Aug. 2015**

Data Science and Engineering Research Lab, Department of Mechanical Engineering, Tianjin University of Science & Technology

- Performed digital analytics of material damage based on damage data. Specifically, we use methods including data-mining, statistical process and multivariate analysis to explore the source physics of material damage.
- Involved two projects:
  --"Experimental Study of Evolving Hierarchical Microstructures of Solid Materials by a Damage Multi-variate", National Natural Sciences Foundation of China (Grant no. 11272234).
  -- "The Study of Damage Evolution of Material and Structure based on Data-enabled Engineering", The Youth Academic Team of "the 12th Five-year Plan" Comprehensive Investment Planning and Discipline Construction Projects, Tianjin University of Science & Technology.

Teaching Assistant **Nov. 2013 to May 2014**

Mechanical Teaching and Research Section, Department of Mechanical Engineering, Tianjin University of Science & Technology

- Explanation and demonstration of mechanical experiments: tensile test, compression test,torsion test, bending test, and so on.
- Be responsible for the maintenance of all experimental machines: tensile test machine, acoustic emission machine, and so on.

- Help teachers to prepare their experimental class and correct the students' homework.

EDUCATION

Doctor of Philosophy Candidate, Electrical Engineering and Computer Engineering & Institute for Intelligent System
The University of Memphis, Memphis, TN **Aug. 2017 to Present**

Intensive English for Internationals,
The University of Memphis, Memphis, TN **Feb. 2017 to Aug. 2017**

Doctor of Philosophy Candidate, Mechanical Engineering
The University of Memphis, Memphis, TN **Aug. 2015 to Feb. 2017**

Master of Science, Machinery Design &Theory
Tianjin University of Science & Technology, Tianjin, China **Sep. 2012 to Mar. 2015**

Bachelor of Science, Traffic and Transportation Engineering
Dezhou University, Dezhou, China **Sep. 2008 to Jun. 2012**

PUBLICATIONS

1. Wayne, Steven F., G. Qi, and **L. Zhang**. "Data-Enabled Quantification of Aluminum Microstructural Damage Under Tensile Loading." JOM 68.8 (2016): 2096-2108.
2. **Zhang, L.,** Li, J., Qi, G., Zhu, Y., Fan, M., & Qi, Y. (2017). Assessment of Damage Evolution in Paper Material Based on Acoustic Emission: An Experimental and Statistical Method. In Advances in Acoustic Emission Technology (pp. 205-217). Springer, Cham.
3. Abderahmane, S., Mokhtar, B. M., Smail, B., Wayne, S. F., **Zhang, L.,** Belabbes, B. B., & Boualem, S. (2017). Experimental and numerical disbond localization analyses of a notched plate repaired with a CFRP patch. Structural Engineering and Mechanics, 63(3), 361-370.
4. **Liang Zhang,** Ming Fan, and Jianyu Li. "Statistical Analysis of Events of Random Damage in Assessing Fracture Process in Paper Sheets Under Tensile Load." Advances in Acoustic Emission Technology. Springer New York, 2015. 267-281
5. **Liang Zhang,** Jianyu Li, Gang Qi. "The Characteristics on Acoustic Emission of Microdamage Evolution Process and Multivariable Statistics in Paper Sheets under Load." Experimental Mechanics, 2014. (in Chinese)