

# Shuting (Judy) Wang

## CONTACT INFORMATION

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## EDUCATION

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- 08/2012 - Present    Ph.D. Candidate**  
Computer Science and Engineering, Pennsylvania State University  
Research Areas: Machine Learning Text Mining and Natural Language Processing  
Advisor: Dr. C. Lee Giles
- 08/2008 - 07/2012    Bachelor of Engineering**  
Software Engineering, Harbin Institute of Technology

## WORK EXPERIENCE

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- 06/2015 - 09/2015    Software Engineer Intern at Facebook, Search Team, Menlo Park, CA**  
• Developed query embeddings for query classification and content ranking.
- 06/2015 - 09/2015    Research Intern at HP Labs, Palo Alto, CA**  
• Constructed domain concept maps using web knowledge base.  
• Developed an interactive assessment systems with domain concept maps.
- 01/2012 - 06/2012    Software Engineer Intern at Baidu, Web Data Mining Team, Beijing, China**  
• Analyzed large-scale web data for web page evaluation using Hadoop.

## PROJECTS

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- 08/2014 - Present    Concept Maps Creation from Textbooks**  
• Explored local and global consistency for concept hierarchies extraction.  
• Proposed joint optimization model for concept maps creation with the aid of web knowledge base.
- 08/2014 - Present    BBookX: Automated Book Creation System**  
• Developed an interactive system based on Solr/Lucene that allows users to dynamically create textbooks.

## 02/2013 - 06/2014 **Knowledge Extraction from Patents**

- Interpreted knowledge flow between patents by analyzing patent citations.
- Detected patent trend topics from patent documents.

## PUBLICATIONS

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- [1] **Shuting Wang**, Alex Ororbia, Zhaohui Wu, Chen Liang, Kyle Williams, and C Lee Giles. Using prerequisites to extract concept maps from textbooks. In *ACM International Conference on Information and Knowledge Management*, 2016.
- [2] **Shuting Wang** and Lei Liu. Prerequisite concept maps extraction for automatic assessment. In *Learning & Education with the Web of Data (Best Paper Award)*, 2016.
- [3] Sagnik Ray Choudhury, **Shuting Wang**, and C. Lee Giles. Scalable algorithms for scholarly figure mining and semantics. In *Semantic Big Data@SIGMOD*, 2016.
- [4] Sagnik Ray Choudhury, **Shuting Wang**, and C Lee Giles. Curve separation for line graphs in scholarly documents. In *ACM/IEEE-CS on Joint Conference on Digital Libraries*, 2016.
- [5] Chen Liang, **Shuting Wang**, Zhaohui Wu, Kyle Williams, Bart Pursel, Benjamin Brautigam, Sherwyn Saul, Hannah Williams, Kyle Bowen, and C. Lee Giles. Bbookx: Building online open books for personalized learning. In *Association for the Advancement of Artificial Intelligence*, 2016.
- [6] **Shuting Wang**, Chen Liang, Zhaohui Wu, Kyle Williams, Bart Pursel, Benjamin Brautigam, Sherwyn Saul, Hannah Williams, Kyle Bowen, and C. Giles. Concept hierarchies extraction from textbooks. In *ACM Symposium on Document Engineering*, 2015.
- [7] Chen Liang, **Shuting Wang**, Zhaohui Wu, Kyle Williams, Bart Pursel, Benjamin Brautigam, Sherwyn Saul, Hannah Williams, Kyle Bowen, and C Lee Giles. Bbookx: An automatic book creation framework. In *ACM Symposium on Document Engineering*, 2015.
- [8] **Shuting Wang**, Zhen Lei, and Wang-Chien Lee. Exploring legal patent citations for patent valuation. In *ACM International Conference on Conference on Information and Knowledge Management*, 2014.
- [9] **Shuting Wang**, Wang-Chien Lee, Zhen Lei, Xianliang Zhang, and Yu-Hsuan Kuo. Exploring technological trends for patent evaluation. In *IEEE Data Science and Advanced Analytics*, 2014.

## SKILL

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Programming    Java, Python, C++, SQL, MATLAB, Shell Script

Platform        Hadoop, Solr

Teaching        Teaching Assistant for Database Management Systems  
Teaching Assistant for Introduction to Programming Techniques