Curriculum Vitae of Tianxing Wu

Birth year: 1990
Email: wutianxing@ntu.edu.sg

Research Interests

Artificial Intelligence, Knowledge Graph, Semantic Web and Data Mining

Education

March, 2015 – September, 2018
Ph.D. in Software Engineering
Southeast University, China (Advisor: Prof. Dr. Guilin Qi)

September, 2012 – November, 2014
Master of Engineering in Software Engineering
Southeast University, China (Advisor: Prof. Dr. Guilin Qi)

September, 2008 – June, 2012
Bachelor of Engineering in Computer Science and Technology (Software Class)
Nanjing Tech University, China (GPA Ranking: 2/109)

Professional Experience

June, 2018 – now
Postdoc Researcher
Research Associate (June, 2018 – September, 2018)
Research Fellow (October, 2018 – December, 2019)
at the Research Group of "Data Management and Analytics", School of Computer
Science and Engineering, Nanyang Technological University, Singapore
(work with Prof. Dr. Arijit Khan)

July, 2016 – September, 2016
Visiting Researcher
at the Research Group of "Web Science and Knowledge Management", Institute AIFB,
Karlsruhe Institute of Technology, Germany (work with Dr. Lei Zhang)

Awards and Scholarships

2017   **Chinese National Scholarship for PhD Students** (30,000 CNY)
           the 2nd time during my PhD

2016	**Chinese National Scholarship for PhD Students** (30,000 CNY)
	3 out of about 70 CS PhD students in Southeast University each year

2016	**Excellent Master Degree Thesis of Jiangsu Province (China)**
	300 out of all the master degree theses (2014 – 2015) of 47 universities or institutes in Jiangsu Province (China)

2016	**Excellent Master Degree Thesis of Southeast University**
	52 out of 3,492 master degree theses (2014 – 2015) of Southeast University

2014	**Excellent Master Degree Graduate of Southeast University**
	10 out of about 150 CS master degree graduates in Southeast University (2014)

2010	**Chinese National Scholarship for Undergraduate Students** (8,000 CNY)
	3 out of about 1000 CS and EE undergraduates in Nanjing Tech University each year

Funding

Publications (https://scholar.google.com/citations?user=VE7OlAkAAAAJ&hl=zh-CN)

Book Chapter

Tianxing Wu, Guilin Qi, Cheng Li. Introduction to Chinese Knowledge Graphs and their Applications. The New Silk Road Leads through the Arab Peninsula: Mastering Global Business and Innovation. Emerald Publishing Limited, 2019: 153-167.

Journal and Conference Papers:

2020
Tianxing Wu, Haofen Wang, Cheng Li, Guilin Qi, Xing Niu, Meng Wang, Lin Li, Chaomin Shi. Knowledge graph construction from multiple online encyclopedias. *World Wide Web-Internet and Web Information Systems (WWWJ)*, 2020. (IF=1.77)

2019
Tianxing Wu, Guilin Qi, Bin Luo, Lei Zhang, Haofen Wang. Language-Independent Type Inference of the Instances from Multilingual Wikipedia. *International Journal on Semantic Web and Information Systems (IJSWIS), 2019, 15(2): 22-46*. (IF=1.833)

Bing Liu, Huan Gao, Guilin Qi, Shangfu Duan, **Tianxing Wu**, Meng Wang. Adversarial Discriminative Denoising for Distant Supervision Relation Extraction. *In: Proceedings of the 24th International Conference on Database Systems for Advanced Applications (DASFAA), Part III, 2019: 282-286.* (Short Paper)

Yongpan Sheng, Meng Wang, **Tianxing Wu**, Han Xu. Adaptive Local Learning Regularized Nonnegative Matrix Factorization for Data Clustering. *Applied Intelligence, 2019, 49(6): 2151-2168.* (IF=2.882)

Bing Liu, Guilin Qi, Lu Pan, Shangfu Duan, **Tianxing Wu**. Incorporating Human Knowledge in Neural Relation Extraction with Reinforcement Learning. *In: Proceedings of International Joint Conference on Neural Networks (**IJCNN**), 2019*. (Full Paper)

Mengyi Zhang, **Tianxing Wu**, Qiu Ji, Guilin Qi. Mining Hypernym-Hyponym Relations from Social Tags via Tag Embedding. *In: Proceedings of the 5th International Conference on Artificial Intelligence and Security (**ICAIS**), 2019: 319-328*. (Short Paper)

2018
Tianxing Wu, Haofen Wang, Guilin Qi, Jiangang Zhu, Tong Ruan. On building and publishing Linked Open Schema from social Web sites. *Journal of Web Semantics (**JWS**), 2018, 51: 39-50*. (IF=2.429)

Tianxing Wu, Guilin Qi, Cheng Li, Meng Wang. A Survey of Techniques for Constructing Chinese Knowledge Graphs and Their Applications. *Sustainability, 2018, 10(9): 3245*. (IF=2.592)

Kang Xu, Guilin Qi, Junheng Huang, **Tianxing Wu**, Xuefeng Fu. Detecting bursts in sentiment-aware topics from social media. *Knowledge-Based Systems (**KBS**), 2018, 21(2): 443-461*. (IF=4.396)

Qiu Ji, Guilin Qi, Huan Gao, **Tianxing Wu**. Survey on Schema Induction from Knowledge Graphs. *In: Proceedings of the 3rd China Conference on Knowledge Graph and Semantic Computing (**CCKS**), 2018: 136-142* . (Short Paper)

2017
Tianxing Wu, Lei Zhang, Guilin Qi, Xuan Cui, Kang Xu. Encoding Category Correlations into Bilingual Topic Modeling for Cross-Lingual Taxonomy Alignment. *In: Proceedings of the 16th International Semantic Web Conference (**ISWC**), Part I, 2017: 728-744*. (Full Paper)

Kang Xu, Guilin Qi, Junheng Huang, **Tianxing Wu**. Incorporating Wikipedia concepts and categories as prior knowledge into topic models. *Intelligent Data Analysis (**IDA**), 2017, 21(2): 443-461.* (IF=0.772)

Tianxing Wu, Du Zhang, Lei Zhang, Guilin Qi. Cross-Lingual Taxonomy Alignment with Bilingual Knowledge Graph Embeddings. *In: Proceedings of the 7th Joint International Semantic Technology Conference (**JIST**), 2017: 251-258*. (Short Paper)

Tianxing Wu, Cong Gao, Guilin Qi, Lei Zhang, Chuanqi Dong, He Liu, Du Zhang. KG-Buddhism: The Chinese Knowledge Graph on Buddhism. *In: Proceedings of the 7th Joint International Semantic Technology Conference (**JIST**), 2017: 259-267*. (Short

Paper)

Kang Xu, Feng Liu, **Tianxing Wu**, Sheng Bi, Guilin Qi. A Fast and Effective Framework for Lifelong Topic Model with Self-learning Knowledge. *In: Proceedings of the 16th China National Conference on Computational Linguistics (CCL), 2017: 147-158.* (Full Paper)

Kang Xu, Junheng Huang, **Tianxing Wu**. A Sentiment and Topic Model with Timeslice, User and Hashtag for Posts on Social Media. *In: Proceedings of the 2nd China Conference on Knowledge Graph and Semantic Computing (CCKS), 2017: 59-65.* (Short Paper)

2016
Tianxing Wu, Guilin Qi, Haofen Wang, Kang Xu, Xuan Cui. Cross-Lingual Taxonomy Alignment with Bilingual Biterm Topic Model. *In: Proceedings of the 30th AAAI Conference on Artificial Intelligence (AAAI), 2016: 287-293.* (Full Paper)

Kang Xu, Guilin Qi, Junheng Huang, **Tianxing Wu**. A Joint Model for Sentiment-Aware Topic Detection on Social Media. *In: Proceedings of 22nd European Conference on Artificial Intelligence (ECAI), 2016: 238-346.* (Full Paper)

Tianxing Wu, Shengjia Yan, Zhixin Piao, Liang Xu, Ruiming Wang, Guilin Qi. Entity Linking in Web Tables with Multiple Linked Knowledge Bases. *In: Proceedings of the 6th Joint International Semantic Technology Conference (JIST), 2016: 239-253.* (Full Paper)

2014
Haofen Wang, **Tianxing Wu**, Guilin Qi, Ruan Tong. On Publishing Chinese Linked Open Schema. *In: Proceedings of the 13th International Semantic Web Conference (ISWC), International Semantic Web Conference, Part I, 2014: 293-308.* (Full Paper)

Tianxing Wu, Shaowei Ling, Guilin Qi, Haofen Wang. Mining Type Information from Chinese Online Encyclopedias. *In: Proceedings of the 4th Joint International Semantic Technology Conference (JIST), 2014: 213-229.* (Full Paper)

Tianxing Wu, Guilin Qi, Haofen Wang. Zhishi.schema Explorer: A Platform for Exploring Chinese Linked Open Schema. *In: Proceedings of the 7th Chinese Semantic Web Symposium and 2nd Chinese Web Science Conference (CSWS), 2014: 174-181.* (Demo Paper)

Yanfang Ma, Huan Gao, **Tianxing Wu**, Guilin Qi. Learning Disjointness Axioms With Association Rule Mining and Its Application to Inconsistency Detection of Linked Data. *In: Proceedings of the 7th Chinese Semantic Web Symposium and 2nd Chinese Web Science Conference (CSWS), 2014: 29-41.* (Full Paper)

Patents in China
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[1] A Machine Learning Based Approach for Matching Ontologies in Literature Domain, Inventors: **Tianxing Wu**, Guilin Qi, Bin Luo, Bin Lu, Application Number: 201410799922.3; (granted)

[2] A Machine Learning Based Approach for Constructing Social Network Ontologies, Inventors: **Tianxing Wu**, Cheng Li, Guilin Qi，Application Number: 201610115254.7; (granted)

[3] A Table Entity Linking Approach Based on Multiple Knowledge Bases, Inventors: **Tianxing Wu**, Guilin Qi, Taiyun Liu, Shenjia Yan, Zhixin Piao, Liang Xu, Ruiming Wang, Application Number: 201610920031.8; (granted)

[4] A Machine Learning Based Approach for Cross-Lingual Taxonomy Alignment, Inventors: Yishu Fang, Guilin Qi, **Tianxing Wu**, Bin Lu, Application Number: 201510105414.5; (granted)

[5] A Ontology Matching Method and System Based on Machine Learning, Inventors: Yuncheng Hua, Guilin Qi, **Tianxing Wu**, Huan Gao, Application Number: 201610595524.9; (under review)

[6] A Cross-Lingual Taxonomy Matching Method Based on Topic Model, Inventors: Xuan Cui, Guilin Qi, **Tianxing Wu**, Application Number: 201710441927.2; (under review)

[7] A Dynamic Knowledge Graph Updating Approach, Inventors: Guilin Qi, Cheng Li, Lin Li, **Tianxing Wu**, Application Number: 201810627957.7; (under review)

Service Activities

Conferences
2020   **Program Committee Member** of ECAI,
        External Reviewer of VLDB,
2019   **External Reviewer** of VLDB, WWW, ISWC, DSAA
2018   **External Reviewer** of IJCAI, ICDM
2017   **External Reviewer** of AAAI, IJCAI
2016   **External Reviewer** of AAAI, IJCAI, WWW, ISWC, JIST
2015   **External Reviewer** of AAAI, WWW, ISWC, ESWC, JIST
2014   **External Reviewer** of ISWC, EKAW, CSWS

Journals
Editorial Review Board Member of International Journal on Semantic Web and Information Systems (IJSWIS)

2019   **Reviewer** of Knowledge-based Systems (KBS), Concurrency and Computation:

Practice and Experience (CCPE), International Journal of Cognitive Informatics and Natural Intelligence (IJCINI), Information;

External Reviewer of Information Sciences (IS)

2018 **Reviewer** of Knowledge-based Systems (KBS), International Journal on Semantic Web and Information Systems (IJSWIS)

External Reviewer of Journal of Web Semantics (JWS)

2017 **Reviewer** of International Journal on Semantic Web and Information Systems (IJSWIS)

2016 **External Reviewer** of Journal of Web Semantics (JWS)

2015 **External Reviewer** of Journal of Web Semantics (JWS)

Workshops

2020 **Program Committee Member** of GRADES-NDA 2020, the 3rd Joint International Workshop on Graph Data Management Experiences & Systems and Network Data Analytics (co-located with SIGMOD 2020)

2019 **Program Committee Member** of GRADES-NDA 2019, the 2nd Joint International Workshop on Graph Data Management Experiences & Systems and Network Data Analytics (co-located with SIGMOD 2019)

2018 **Program Committee Member** of BigGraphs 2018, the 5th International Workshop on High Performance Big Graph Data Management, Analysis, and Mining (co-located with IEEE BigData 2018)