

# Bowen Xu

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## Research Interests

Software Analytics, Mining Software Repository, Program Analysis

## Working Experience

- May - July, 2017** **Research Associate** in Software Analytics Research Group, Singapore Management University, Singapore  
Supervised by Prof. David Lo
- Feb - July, 2016** **Research Assistant** in Software Engineering Lab, Nanyang Technological University, Singapore  
Supervised by Prof. Zhenchang Xing

## Education

- 2017-Present** **Ph.D Candidate** in School of Information System, Singapore Management University, Singapore  
Supervised by Prof. David Lo
- 2014-2017** **Master Degree** in School of Software Technology, Zhejiang University, China  
Supervised by Prof. Shanping Li and Prof. Xin Xia
- 2010-2014** **Bachelor Degree** in College of Computer Science and Technology, Hunan City University, China

## Publications

- Conference Papers**
- PAKDD'19** [C9] Ting Zhang, **Bowen Xu (Corresponding Author)**, Ferdian Thung, Stefanus Agus Haryono, David Lo, Lingxiao Jiang. "Sentiment Analysis for Software Engineering: How Far Can Pre-trained Transformer Models Go?". *36th IEEE International Conference on Software Maintenance and Evolution (ICSME 2020)*.  
(Acceptance Rate 50/201=24.9%)
- PAKDD'19** [C8] Heng-Yi Li, Shu-Ting Shi, Ferdian Thung, Xuan Huo, **Bowen Xu**, Ming Li, and David Lo. "DeepReview: Automatic Code Review using Deep Multi-Instance Learning". *The 23rd Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2019)*.  
(Acceptance Rate 137/567=24.1%)
- ESEM'18** [C7] **Bowen Xu**, Amirreza Shirani, David Lo and Mohammad Amin Alipour. "Prediction of Relatedness in Stack Overflow: Deep Learning vs. SVM - A Reproducibility Study". *12th International Symposium on Empirical Software Engineering and Measurement (ESEM 2018)*. **Highly Commended Full Paper Award**  
(Acceptance Rate 30/140=21.4%)
- ASE'17** [C6] **Bowen Xu**, Zhenchang Xing, Xin Xia, David Lo. "AnswerBot - Automated Generation of Answer Summary to Developers' Technical Questions". *32nd IEEE/ACM International Conference on Automated Software Engineering (ASE 2017)*.  
(Acceptance Rate 65/314=20.7%)
- ASE'16** [C5] **Bowen Xu**, Deheng Ye, Zhenchang Xing, Xin Xia, Guibin Chen, Shanping Li. "Predicting Semantically Linkable Knowledge in Developer Online Forums via Convolutional Neural Network".

31st IEEE/ACM International Conference on Automated Software Engineering (ASE 2016).

**ASE'16** [C4] Guibin Chen, Chunyang Chen, Zhenchang Xing, **Bowen Xu**. "Learning Dual-Language Vector Space for Domain-specific Cross-Lingual Question Retrieval". *31st IEEE/ACM International Conference on Automated Software Engineering (ASE 2016)*.

(Acceptance Rate 57/298=19.1%)

**MSR'16** [C3] **Bowen Xu**, Zhenchang Xing, Xin Xia, David Lo, Qingye Wang, Shanping Li. "Domain-Specific Cross-Language Relevant Question Retrieval". 13th International Conference on Mining Software Repositories (MSR 2016). *Invited to Empirical Software Engineering Journal*

(Acceptance Rate 36/103=35%)

**ICECCS'15** [C2] Yun Zhang, David Lo, Xin Xia, **Bowen Xu**, Jianling Sun, Shanping Li. "Combining Software Metrics and Text Features for Vulnerable File Prediction". 20th International Conference on Engineering of Complex Computer Systems (ICECCS 2015).

(Acceptance Rate 17/71=23.9%)

**APSEC'15** [C1] **Bowen Xu**, David Lo, Xin Xia, Ashish Sureka, Shanping Li. "EFSPredictor: Predicting Configuration Bugs With Ensemble Feature Selection". 22th Asia-Pacific Software Engineering Conference (APSEC 2015).

(Acceptance Rate 51/182=28.02%)

### Journal Papers

**TSE'20** [J3] **Bowen Xu**, HOANG Van Duc Thong, Abhishek SHARMA, Xin Xia, and David Lo. "Post2Vec: Learning Distributed Representations of Stack Overflow Posts". IEEE Transactions on Software Engineering (TSE).  
Under Review

**EMSE'19** [J2] **Bowen Xu**, Le An, Ferdian Thung, Foutse Khomh, David Lo. "Why Reinventing the Wheels? An Empirical Study on Library Reuse and Re-implementation". Empirical Software Engineering (EMSE). *To be presented during ICSE 2020 as part of the Journal First Paper Track*

**EMSE'17** [J1] **Bowen Xu**, Zhenchang Xing, Xin Xia, David Lo, Shanping Li. "Domain-Specific Cross-Language Relevant Question Retrieval". Empirical Software Engineering (EMSE).

### Tool Demo Papers

**ESEC/FSE'19** [T2] Liang Cai, Haoye Wang, **Bowen Xu**, Qiao Huang, Xin Xia, David Lo, Zhenchang Xing. "AnswerBot: An Answer Summary Generation Tool Based on Stack Overflow". The 27th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE 2019).

**ESEC/FSE'17** [T1] **Bowen Xu**, Zhenchang Xing, Xin Xia, David Lo. "XSearch: A DomainSpecific Cross-Language Relevant Question Retrieval Tool". 11th joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering.

### Workshop Papers

**AAAI RCQA'19** [W1] Amirreza Shirani, **Bowen Xu**, David Lo, Tamar Solorio and Mohammad Amin Alipour. "Question Relatedness on Stack Overflow: The Task, Dataset, and Corpus-inspired Model". AAAI 2019 Reasoning and Complex QA Workshop.

## Professional Service

**TOIS'20** **Journal Referee** for ACM Transactions on Information Systems.

**JSS'20** **Journal Referee** for Journal of Systems and Software.

## Certifications, honors & awards

<b>2020</b>	Dean's List, Singapore Management University, Singapore.
<b>2020</b>	Presidential Doctoral Fellowship, Singapore Management University, Singapore.
<b>2019</b>	Graduate Instructor Certification, Singapore Management University, Singapore.
<b>2019</b>	English Communication Skills for PhD Candidates Certification, British Council, Singapore.
<b>2017</b>	Excellent Graduate of Zhejiang Province, Ministry of Education of the People's Republic of Zhejiang Province (top3%), China.
<b>2014</b>	Scholarship of State Street (top5%), State Street Corp, U.S.A.
<b>2012</b>	National Scholarship (top3%), Ministry of Education of the People's Republic of China, China.