Bowen Xu

Ph.D Candidate School of Information System Singapore Management University

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Research Interests

Software Analytics, Automated Program Repair

Education

2017-Present Ph.D Candidate in School of Information System, Singapore Management University, Singapore Supervised by Prof. David Lo

Master Degree in School of Software Technology, Zhejiang University, China 2014-2017

Supervised by Prof. Shanping Li and Prof. Xin Xia

2010-2014 Bachelor Degree in College of Computer Science and Technology, Hunan City University, China

Professional Service

External Reviewer for the 19th IEEE International Working Conference on Source Code Analysis SCAM'19 and Manipulation.

External Reviewer for the 2nd International Workshop on Software Analytics. SWAN'16

SATE'16 External Reviewer for the 2016 Annual Conference on Software Analysis, Testing and Evolution.

Working Experience

Research Associate in Software Analytics Research Group, Singapore Management University, May - July,

2017 Singapore

Supervised by Prof. David Lo

Feb - July, Research Assistant in Software Engineering Lab, Nanyang Technological University, Singapore

2016 Supervised by Prof. Zhenchang Xing

Publications

Conference Papers

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 Relat-

> edness 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%)

[C6] Bowen Xu, Zhenchang Xing, Xin Xia, David Lo. "AnswerBot - Automated Generation of ASE'17

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).

(Acceptance Rate 57/298=19.1%)

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

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).

(Tool Demo: http://answerbot.cn)

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.

(Tool Demo: http://67.230.191.128:8080/XSearch)

Workshop Papers

AAAI [W1] Amirreza Shirani, Bowen Xu, David Lo, Thamar Solorio and Mohammad Amin Alipour.

RCQA'19 "Question Relatedness on Stack Overflow: The Task, Dataset, and Corpus-inspired Model". AAAI 2019 Reasoning and Complex QA Workshop.

Certifications, honors & awards

2019	Graduate Instructor Certification, Singapore Management University, Singapore.
2019	English Communication Skills for PhD Candidates Certification, British Council, Singapore.
2017	Excellent Graduate of Zhejiang Province, Ministry of Education of the People's Republic of Zhe-
	jiang Province (top3%), China.
2014	Scholarship of State Street (top5%), State Street Corp, U.S.A.

2012 National Scholarship (top3%), Ministry of Education of the People's Republic of China, China.