Bowen Xu

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Research Works

Google Scholar: shorturl.at/hzBC5

⇒ **Conference Papers (Research Track Papers by Default)**

ICPC'22   [C12] Junda He, **Bowen Xu**, Zhou Yang, DongGyun Han, Chengran Yang and David Lo. "PTM4Tag: Sharpening Tag Recommendation of Stack Overflow with Pre-trained Models". *30th ACM/IEEE International Conference on Program Comprehension (ICPC 2022).*

SANER'22   [C11] Jieke Shi, Zhou Yang, Junda He, **Bowen Xu** and David Lo. "Can Identifier Splitting Improve Open-Vocabulary Language Model of Code?". *29th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2022).*

Accepted as a ERA track Paper.

SANER'22   [C10] Chengran Yang, **Bowen Xu**, Junaed Younus Khan, Gias Uddin, Donggyun Han, Zhou Yang and David Lo. "Aspect-Based API Review Classification: How Far Can Pre-Trained Transformer Model Go?". *29th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2022).*

ICSME'20   [C9] Ting Zhang, **Bowen Xu**, 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).*

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).*

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***

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).*

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).*

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***
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).*
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).*

⇒ **Journal Papers**

TSE'21	[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).* ***Presented during ICSE 2022 as part of the Journal First Paper Track***
EMSE'20	[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).* ***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". *The 25th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE 2017).*

⇒ **Workshop Paper**

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

Teaching

2022	Guest Instructor, Singapore Management University, IS706 - Software Mining and Analysis
2020	Teaching Assistant, Singapore Management University, IS706 - Software Mining and Analysis
	Students' Feedback: https://tinyurl.com/1t9xklsh
2019	Graduate Instructor Certification, Singapore Management University, Singapore.

Education

2017-2021   **Ph.D Candidate** in School of Computing and Information Systems, Singapore Management University, Singapore

Supervised by Prof. David Lo (IEEE Fellow, ACM Distinguished Member (Scientist))

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

Supervised by Prof. Shanping Li and Prof. Xin Xia (Top 40 Young Researchers in Australia)

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

Working Experience

August, 2021 - Present   **Research Scientist (Post-Doc)** in Software Analytics Research Group, Singapore Management University, Singapore

Work with Prof. David Lo

Feb - July, 2016   **Research Assistant** in Software Engineering Lab, Nanyang Technological University, Singapore

Work with Prof. Zhenchang Xing

Research Mentoring

I am honored to mentor the following students.

- Ting Zhang, PhD on the work ICSME'20
- Chengran Yang, PhD on the work TSE'21, SANER'22
- Jieke Shi, PhD on the work SANER'22
- Junda He, PhD on the work ICPC'22

Professional Services

MaL-TeSQuE'22   **Co-Organizer** for The 5th edition of the International Workshop on Machine Learning Techniques for Software Quality Evolution, collocated with ESEC/FSE 2022.

EMSE'22   **Journal Referee** for Empirical Software Engineering, 2022.

MSR'22   **Program Committee** for Data and Tool Showcase Track, The 2022 Mining Software Repositories Conference.

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

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

Certifications, honors & awards

2020   Dean's List (top3%), Singapore Management University, Singapore.

2020   Presidential Doctoral Fellowship (top3%), Singapore Management University, Singapore.

2017   Excellent Graduate of Zhejiang Province, Ministry of Education of the People's Republic of Zhejiang 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.