

THONG HOANG

School of Information System, Singapore Management University

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Homepage: <https://hvdthong.github.io/>

EDUCATION

Singapore Management University, Singapore

August 2016 - Present

School of Information System

Ph.D. Candidate

Konkuk University, South Korea

March 2009 - June 2011

Department of Advanced Technology Fusion

Master of Computer Science

Ho Chi Minh City University of Technology, Vietnam

September 2004 - February 2009

Department of Computer Science

Bachelor of Computer Science

RESEARCH INTEREST

- **Software repository mining:** Code understanding and inference; bug localization; bug fixing patches; just-in-time defect prediction
- **Social network analysis and mining:** Tracking topics in document streams; modelling users and communities

WORKING EXPERIENCE

Research Intern; Fujitsu Lab of America; Silicon Valley

September 2019 - December 2019

- Developing a system for checking the quality of AI models

Research Engineer; Singapore Management University

May 2015 - July 2016

- Developing a dashboard for tracking transportation systems in Singapore using social media
- Developing a system for detecting transportation events and perform sentiment analysis

Research Engineer; Ghent University

February 2012 - April 2015

- Developing a ranking system for finding relevant documents given a query
- Employing a budget aware learning, by exploiting cheap approximate annotation, to minimize human annotation effort

TEACHING

Singapore Management University

August 2016 - Present

- Business and data management, as teaching assistant (IS110)
- Computation thinking, as teaching assistant (IS103)

SKILLS

Programming Languages	Python, Java, Matlab, R, C/C++/C#
Deep Learning Frameworks	Pytorch, Tensorflow, Keras, Theano
Machine Learning Libraries	Sklearn, Numpy, Pandas, Weka
Operating Systems	Linux, Windows
Database Management	MS SQLServer, MySQL, ElasticSearch
Editor	Latex, MS Office

PUBLICATION

Xu Bowen, Thong Hoang, Abhishek Sharma, Xin Xia, David Lo; **Post2Vec: Learning Distributed Representations of Stack Overflow Posts**; submitted to IEEE Transactions on Software Engineering (TSE), 2020 (major revision).

Roy Ka-Wei Lee, Thong Hoang, Richard J. Oentaryo, David Lo; **Keen2Act: Activity Recommendation in Online Social Collaborative Platforms**; International Conference on User Modeling, Adaptation and Personalization, Short Paper, Genoa, Italy, 2020.

Thong Hoang, Hong Jin Kang, Julia Lawall, David Lo; **CC2Vec: Distributed Representations of Code Changes**; The 42nd International Conference on Software Engineering (ICSE), Seoul, South Korea, 2020.

Thong Hoang, Julia Lawall, Richard J Oentaryo, Yuan Tian, David Lo; **PatchNet: Hierarchical Deep Learning-Based Stable Patch Identification for the Linux Kernel**; IEEE Transactions on Software Engineering (TSE), 2019.

Thong Hoang, Hoa Khanh Dam, Yasutaka Kamei, David Lo, Naoyasu Ubayashi; **DeepJIT: An End-To-End Deep Learning Framework for Just-In-Time Defect Prediction**; The 16th Mining Software Repositories Conference (MSR 2019), Montreal, Canada, May 2019.

Thong Hoang, Julia Lawall, Richard J Oentaryo, Yuan Tian, David Lo; **PatchNet: A Tool for Deep Patch Classification**; The 41st ACM/IEEE International Conference on Software Engineering (ICSE 2019), Demonstrations Track, Montreal, Canada, May 2019.

Thong Hoang, Richard J Oentaryo, Tien-Duy Bui Le, David Lo; **Network-clustered multi-modal bug localization**; IEEE Transactions on Software Engineering (TSE), 2018.

Thong Hoang, Pei Hua Cher, Philips Prasetyo Kokoh, Ee-Peng Lim; **Crowdsensing and Analyzing Micro-Event Tweets for Public Transportation Insights**; The 2nd International workshop on Big Data for Sustainable Development with IEEE Big Data (IEEE BigData), Washington, USA, December 2016.

Thong Hoang, Thomas Demeester, Johannes Deleu, Piet Demeester, Chris Develder; **Ugent Participation in the Microblog Track 2012**; The 22nd Text Retrieval Conference (TREC 2012), Gaithersburg, USA, October 2012.

Thong Hoang, Thomas Demeester, Chris Develder, Hyoseop Shin; **Effectiveness of Learning to Rank for finding User Similarity in Social Media**; The 12th Dutch-Belgian Information Retrieval Workshop (DIR 2012), Ghent, Belgium, April 2012.

Nhat Hai Phan, Thong Hoang, and Hyoseop Shin; **Adaptive Combination of Tag and Link-based User Similarity in Flickr**; The 18th ACM International Conference on Multimedia (ACM MM 2010), Firenze, Italy, October 2010.

Thong Hoang, Nhat Hai Phan, and Hyoseop Shin; **An Empirical Analysis of User Clusters in Online Communities**; The 2nd International Conference on Emerging Databases (EDB 2010), Jeju, South Korea, August 2010.

AWARDS

2019: Awarded SMU Presidential Doctoral Fellowship
2016: Full Ph.D. scholarship from ministry of Education, Singapore
2009: Full M.S. scholarship from National Research Foundation, South Korea
2009: University scholarship for academic excellency, Ho Chi Minh City University of Technology
2008: FPT software company award for excellent student in training course, Vietnam
2004: Bronze medal in Mathematics competition of Khanh Hoa province, Vietnam

SCIENTIFIC COMMUNITY ACTIVITIES

Journal Review: Neurocomputing (2018, 2019, 2020), IST (2019), DAMI (2019), SCP (2020), IEEE TSE (2020)

Conference Review (and Sub-Review): SCAM (2019), ICECCS (2019), SANER (2020), KDD (2020)

Student Volunteer:

- The 18th IEEE International Conference on Data Mining (ICDM 2018)
- The 31st IEEE/ACM International Conference on Automated Software Engineering (ASE 2016)

REFERENCES

Dr. David Lo

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Singapore Management University
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Dr. Richard Oentaryo

Lead Data Scientist
McLaren Applied (Singapore)
Email: oentaryorj@gmail.com

Dr. Julia Lawall

Inria Senior Research Scientist
Sorbonne University, Inria, LIP6
Email: Julia.Lawall@lip6.fr