

# Dung D. Le

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## ABOUT ME

Dung D. Le is currently a senior data scientist in Ads and Personalization team, Grab Holdings Inc.. He is a former research scientist in School of Information Systems, Singapore Management University (SMU). He earned his PhD in Data Science and Engineering from the same university, working with Associate Professor Hady W. Lauw. In his candidature, he has been recognized with SMU Presidential Doctoral Fellowship Award (AY2018 and AY2019) and SMU PhD Student Life Award (AY2018 and AY2019). Formerly, he earned his Degree of Engineer in Mathematics and Informatics from Hanoi University of Science and Technology, in 2014.

More information about him can be found at: <https://andrew-dungle.github.io/>.

## RESEARCH INTEREST

His research interest includes *recommender systems*, *information retrieval*, and *visual analytics*. Specifically, the primary focus of his research can be summarized as following: “*Analyzing online data generated by multiple users to better understand their behaviours and preferences, and applying the learnt knowledge to build effective and efficient personalized recommendation systems.*”

## PUBLICATIONS

### JOURNAL PAPERS

1. Dung D. Le, Hady W. Lauw, *Efficient Retrieval of Matrix Factorization-based Top-k Recommendations: A Survey of Recent Approaches*, Journal of Artificial Intelligence Research (JAIR), 2021.

### CONFERENCE PAPERS

1. Dung D. Le, Hady W. Lauw, *Stochastically Robust Personalized Ranking for LSH Recommendation Retrieval*, AAAI Conference on Artificial Intelligence (AAAI’20), Feb 2020.
2. Dung D. Le, Hady W. Lauw, *Learning Multiple Maps from Conditional Ordinal Triplets*, International Joint Conference on Artificial Intelligence (IJCAI’19), full paper, Aug 2019.
3. Dung D. Le, Hady W. Lauw, *Multiperspective Graph-Theoretic Similarity Measure*, ACM Conference on Information and Knowledge Management (CIKM’18), full paper, Oct 2018.
4. Dung D. Le, Hady W. Lauw, *Indexable Bayesian Personalized Ranking for Efficient Top-k Recommendations*, ACM Conference on Information and Knowledge Management (CIKM’17), full paper, Nov 2017.
5. Dung D. Le, Hady W. Lauw, *Euclidean Co-Embedding of Ordinal Data for Multi-Type Visualization*, SIAM International Conference on Data Mining (SDM’16), full paper, May 2016.

### TUTORIAL

1. Dung D. Le, Hady W. Lauw, *Recent Advances on Scalable Retrieval of Personalized Recommendations*, the Thirty-Third AAAI Conference on Artificial Intelligence (AAAI-19), January 27 – February 1, 2019.

### PRE-PRINT

1. Dung D. Le, Hady W. Lauw, *Personalized Discovery and Expansion of User-Curated Visual Clusters*

<b>EDUCATION</b>	School of Information Systems, <b>Singapore Management University</b> , 80 Stamford Road, Singapore 178902.	
	PhD in Data Science and Engineering	Aug 2015 – Sep 2019
	<ul style="list-style-type: none"> <li>• <b>Thesis:</b> Preference Learning and Similarity Learning Perspectives on Personalized Recommendation</li> <li>• Advisor: Hady W. Lauw.</li> </ul>	
	School of Applied Mathematics and Informatics, <b>Hanoi University of Science and Technology</b> , Hanoi, Vietnam.	
	Degree of Engineer in Mathematics and Informatics ( 5-year advanced undergraduate program ).	Sep 2009 – May 2014
	<ul style="list-style-type: none"> <li>• Valedictorian of School of Applied Mathematics and Informatics.</li> </ul>	
	Mathematics class, <b>Vinh Phuc Gifted high school</b> , Vinh Phuc, Vietnam.	Sep 2006 – Jun 2009
<b>AWARDS &amp; SCHOLARSHIPS</b>	— Conference Travel Awards: AAAI-20, IJCAI-19, AAAI-19, CIKM-18, CIKM-17, SDM-16.	
	— Winner of SMU Presidential Doctoral Fellowship Award AY2018 and AY2019.	
	— Recipient of SMU PhD Student Life Award, AY2018 and AY2019.	
	— Postgraduate scholarship, Singapore Management University ( Aug 2015 ).	
	— Honoured as the valedictorian of School of Applied Mathematics and Informatics, Hanoi University of Science and Technology (Sep 2014).	
	— Scholarships of Vietnam National Program for the Development of Mathematics AY13-14, AY12-13.	
	— Lawrence S.Ting scholarship for excellent student AY2011-12.	
	— Honoured as excellent student of AY2011-12.	
	— National Mathematics Competition for University Students (first prize - 2010, second prize - 2011) .	
	— Third prize, Vietnam Mathematics Olympiad (Mar 2009 – high school level).	
<b>RESEARCH EXPERIENCE</b>	PreferredAI Research Group, School of Information Systems, <b>Singapore Management University</b> ,	
	<b>Position:</b> Research Scientist	Nov 2019 –Now
	<ul style="list-style-type: none"> <li>• <b>Project:</b> Curation and Recommendation.</li> </ul>	
	Living Analytics Research Centre, School of Information Systems, <b>Singapore Management University</b> ,	
	<b>Position:</b> Research Assistant	Oct 2014 – Jun 2015
	<ul style="list-style-type: none"> <li>• <b>Project:</b> Dimensionality Reduction for Recommendation Systems.</li> </ul>	
	FPT Technology Research Institute, <b>FPT Corporation</b> , Hanoi, Vietnam,	
	<b>Position:</b> Intern, part-time employee	Nov 2013 – May 2014
	<ul style="list-style-type: none"> <li>• <b>Project:</b> Statistical classification techniques for question reformulation problem.</li> </ul>	
	Mathematics Research Department, <b>Company of Software Engineering</b> , Hanoi, Vietnam,	
<b>TEACHING EXPERIENCE</b>	Position: Intern, part-time employee	Aug 2012 – Sep 2013
	<ul style="list-style-type: none"> <li>• <b>Project:</b> Motorcycle detection, Error Correcting Codes for GSM</li> </ul>	
	AY2019/20-Term 1: Graduate Instructor for COR-IS1702 Computational Thinking	
	AY2017/18-Term 2: Teaching Assistant for IS302 Information Security and Trust	
	AY2017/18-Term 1: Teaching Assistant for IS103 Computational Thinking	

<b>SERVICES</b>	<p>[1] Program Committee:</p> <ul style="list-style-type: none"> <li>• <b>2021:</b> PAKDD, IJCAI</li> <li>• <b>2020:</b> PAKDD, IJCAI</li> </ul> <p>[2] External Reviewer:</p> <ul style="list-style-type: none"> <li>• <b>2017:</b> PAKDD, DSAA</li> <li>• <b>2016:</b> PAKDD, DSAA</li> </ul> <p>[13] Student Volunteer, IEEE International Conference on Data Mining 2018 (ICDM'18), Dec 2018.</p> <p>[4] Student Volunteer, IEEE/WIC/ACM International Conference on Web Intelligence - Intelligent Agent Technology 2015 (WI-IAT'15), Dec 2015.</p>
<b>LANGUAGES</b>	Vietnamese (native language), English.
<b>PROJECTS</b>	<p>Besides conducting high-quality research, I also involve in the development of research frameworks/libraries and supervise undergraduate projects.</p> <ul style="list-style-type: none"> <li>• <b>Cerebro:</b> Closed-loop Engine for REcommendations with Blazingly fast Retrieval of Objects</li> <li>• <b>ThriftCity:</b> Personalized Recommendation System for ThriftCity - A Price Comparison Website</li> <li>• <b>VisConcepts:</b> Image Search with Visual Concepts</li> </ul>
<b>REFERENCES</b>	<p><b>Hady W. Lauw,</b> Associate Professor of Information Systems, Singapore Management University, 80 Stamford Road, Singapore 178902, hadywlauw@smu.edu.sg • (+65) 6808-5277.</p> <p><b>Baihua Zheng,</b> Professor of Information Systems, Singapore Management University, 80 Stamford Road, Singapore 178902, bhzheng@smu.edu.sg • (+65) 6828-0915.</p> <p><b>Yuan FANG,</b> Assistant Professor of Information Systems, Singapore Management University, 80 Stamford Road, Singapore 178902, yfang@smu.edu.sg • (+65) 6808-5150.</p> <p><b>Leong, Tze Yun,</b> Professor of Computer Science, School of Computing, National University of Singapore Computing I, 13 Computing Drive, Singapore 117417 leongty@comp.nus.edu.sg • (+65) 6516-6519.</p>