

### RESEARCH INTERESTS

Machine Learning, Probabilistic topic models, Bayesian nonparametrics, Computational social science

### EDUCATION

KAIST, Ph.D., Computer Science, 2015

- Advisor: Alice Oh

- Thesis: Nonparametric Topic Models with Multi-Labeled Dataset

KAIST, M.S., Computer Science, 2011

- Advisor: Alice Oh

- Thesis: Distance Dependent Chinese Restaurant Franchise

Sung Kyun Kwan University, B.S., Computer Science, 2009

### EXPERIENCE

**Research Intern**, Microsoft Research, Redmond, WA, USA, Jun. 2013 - Aug. 2013

- Advisor: Nebojsa Jojic and Alessandro Perina

- Project : Browsing Large Collection of Documents with Counting Grid

**Research Intern**, Microsoft Research Asia, Beijing, China, 2012 - 2012, Sep. 2012 - Feb. 2013

- Advisor: Haixun Wang

- Project : Context-Dependent Conceptualization with Probase and Topic Model

**Research Intern**, ETRI, Daejeon, Korea, Jan. 2008 - Feb. 2008

- Project : Develop test automation tool for SMART-BIT 6000

### PUBLICATIONS

- [1] Jooyeon Kim, Joon Hee Kim, **Dongwoo Kim**, and Alice Oh. Diversity-seeking users and their influence on social news sites. In *Workshop on Data Science for News Publishing (NewsKDD) at KDD 2014*, 2014.
- [2] Alessandro Perina, **Dongwoo Kim**, Andrzej Turski, and Nebojsa Jojic. Skim-reading thousands of documents in one minute: Data indexing and visualization for multifarious search. In *Workshop on Interactive Data Exploration and Analytics (IDEA'14) at KDD 2014*, 2014.
- [3] **Dongwoo Kim** and Alice Oh. Hierarchical dirichlet scaling process. In *Proceedings of the 31th International Conference on Machine Learning (ICML)*, 2014.
- [4] **Dongwoo Kim**, Haixun Wang, and Alice Oh. Context-dependent conceptualization. In *Proceedings of the 23th International Joint Conference on Artificial Intelligence (IJCAI)*, 2013.
- [5] JinYeong Bak, **Dongwoo Kim**, and Alice Oh. Distributed online learning for latent dirichlet allocation. *Workshop on Big Learning : Algorithms, Systems, and Tools at the NIPS.*, 2012.
- [6] Joon Hee Kim, **Dongwoo Kim**, Suin Kim, and Alice Oh. Modeling topic hierarchies with the recursive chinese restaurant process. In *Proceedings of the 21th ACM Conference on Information and Knowledge Management (CIKM)*, 2012.
- [7] **Dongwoo Kim**, Yeonseung Chung, and Alice Oh. Variable selection for latent dirichlet allocation. *arXiv ePrints:1205.1053*, 2012.
- [8] **Dongwoo Kim**, Suin Kim, and Alice Oh. Dirichlet process with mixed random measures: a nonparametric topic model for labeled data. In *Proceedings of the 29th International Conference on Machine Learning (ICML)*, 2012.

- [9] **Dongwoo Kim** and Alice Oh. Accounting for data dependencies within a hierarchical dirichlet process mixture model. In *Proceedings of the 20th ACM Conference on Information and Knowledge Management (CIKM)*, 2011.
- [10] **Dongwoo Kim** and Alice Oh. Topic chains for understanding a news corpus. In *Proceedings of the 12th International Conference on Intelligent Text Processing and Computational Linguistics (CICLING)*, 2011.
- [11] Il-Chul Moon, **Dongwoo Kim**, Yohan Jo, and Alice Oh. Learning influence propagation of personal blogs with content and network analyses. In *2010 IEEE Second International Conference on Social Computing (SocialCom)*, pages 669–674. IEEE, 2010.
- [12] **Dongwoo Kim**, Yohan Jo, Il-Chul Moon, and Alice Oh. Analysis of twitter lists as a potential source for discovering latent characteristics of users. In *Workshop on Microblogging at the ACM Conference on Human Factors in Computer Systems*, 2010.

## AWARDS

Microsoft research fellowship nomination award, Microsoft research asia, 2013

ICML student travel scholarship, International machine learning society, 2012

National science & technology scholarship, Korea student aid foundation, 2008

## TALKS

2014.03.21. Introduction to Probabilistic Topic Models, UNIST, Ulsan, Korea

2014.02.17. Topic model and its applications, NHN, Korea

2011.08.04. Social Media Mining Using Topic Models, NIMS, Korea

## REFERENCES

Alice Oh, Assistant Professor, Computer Science, KAIST, [alice.oh@kaist.edu](mailto:alice.oh@kaist.edu)

Nebojsa Jojic, Principal Researcher, Microsoft Research, [jojic@microsoft.com](mailto:jojic@microsoft.com)

Alessandro Perina, Researcher, Italian Institute of Technology, [alessandro.perina@gmail.com](mailto:alessandro.perina@gmail.com)