# Liping Liu

### Position Visiting Assistant Professor

Department of Computer Science, Tufts University

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### EDUCATION

# Ph.D., Oregon State University, 2016.

Thesis: Machine Learning Methods in Computational Sustainability, advised by Thomas G. Dietterich.

## M.S., Nanjing University, 2009.

Thesis: Fast Feature Extraction and Incremental Dimensionality Reduction based on Machine Learning Techniques, advised by Yuan Jiang and Zhi-Hua Zhou.

B.S., Hebei University of Technology, 2006.

#### EXPERIENCE

2016 – 2017, Visiting assistant professor, Tufts University.

2016 – 2017, Postdoctoral researcher, Columbia University.

2015 summer, Research intern, IBM T.J. Watson Research.

2009 – 2010, Developer, Alibaba.

# RESEARCH INTERESTS

Machine Learning: Classification, Clustering, Graphical Models, Bayesian Analysis Computational Sustainability: Species distribution modeling, Reserve design

## Professional Service

## Reviewer for

- Machine Learning
- IEEE Transactions on Knowledge and Data Engineering (TKDE)
- IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI)
- Journal of Artificial Intelligence Research (JAIR)
- Journal of Machine Learning Research (JMLR)
- ACM Transactions on Spatial Algorithms and Systems
- International Conference on Machine Learning, 2017

### PC member of

- International Joint Conferences on Artificial Intelligence (IJCAI), 2015, 2016, 2017
- AAAI Conference on Artificial Intelligence (AAAI), 2017, 2018

### **PUBLICATIONS**

Liu, L.-P., Blei, M.D.. Zero-Inflated Exponential Family Embeddings. In: Proceedings of the 34th International Conference on Machine Learning (ICML'2017).

**Liu, L.-P.**, Dietterich, T.G., Li, N. and Zhou, Z.-H.. *Transductive Optimization of Top k Precision*. In: Proceedings of the 25th International Joint Conference on Artificial Intelligence 2016.

**Liu, L.-P.**, Quanz, B., Xing, D., Deshpande, A. and Liu, X.. *Predicting Weeks-Of-Supply via Sequence Aggregating*. In: Proceedings of the 2015 INFORMS Workshop on Data Mining and Analytics. 2015.

Pei, Y, **Liu, L.-P.** and Fern, X.. Bayesian Active Clustering with Pairwise Constraints. In: Proceedings of European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML PKDD'2015).

- **Liu, L.-P.**, Sheldon, D. and Dietterich, T.G.. Gaussian Approximation of Collective Graphical Models. In: Proceedings of the 31st International Conference on Machine Learning (ICML'2014).
- Liu, L.-P. and Dietterich, T.G.. Learnability of the Superset Label Learning Problem. In: Proceedings of the 31st International Conference on Machine Learning (ICML'2014).
- **Liu, L.-P.** and Dietterich, T.G.. A Conditional Multinomial Mixture Model for Superset Label Learning. In: Proceedings of the 2012 Conference on Neural Information Processing Systems (NIPS'2012).
- **Liu, L.-P.** and Fern, Z. X.. *Constructing Training Set for Outlier Detection*. In: Proceedings of the 12th SIAM International Conference on Data Mining (SDM'2012).
- Hutchinson, R., Liu, L.-P. and Dietterich, T.G.. *Incorporating Boosted Regression Trees into Ecological Latent Variable Models*. In: Proceedings of the 25th AAAI Conference on Artificial Intelligence (AAAI'2011).
- **Liu, L.-P.**, Jiang, Y. and Zhou, Z.-H.. *Least Square Incremental Linear Discriminant Analysis*. In: Proceedings of the 9th IEEE International Conference on Data Mining (ICDM'2009).
- **Liu, L.-P.**, Yu, Y., Jiang, Y., and Zhou, Z.-H.. *TEFE: A Time-Efficient Approach to Feature Extraction*. In: Proceedings of the 8th IEEE International Conference on Data Mining (ICDM'2008).
- Jiang, Y., **Liu**, **L.-P.**. Survey of Data Mining on Data Stream (in Chinese). Journal of Jiangnan University (Natural Science Edition). pp. 654-657.