Lu Lin

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https://louise-lulin.github.io

RESEARCH INTERESTS

I have a broad interests on Machine Learning, with a focus on representation learning from multi-modal data, e.g. graph, text and etc.

EDUCATION

University of Virginia (UVa)

09/2017 - Present

Ph.D. in Computer Science Advisor: Hongning Wang

Beihang University

08/2014 - 04/2017

M.S. in Computer Science

Beihang University B.S. in Computer Science

09/2010 - 06/2014

RESEARCH EXPERIENCE

LinkedIn

06/2020 - 09/2020

Machine Learning Intern

Building a framework to learn entity embeddings from heterogeneous graphs, and the link prediction performance is improved by the graph embedding model with attention mechanism and multitask objectives.

• Mentor: Yang Yang

UVa Human-Centric Data Mining Group

09/2017 - Present

Research Assistant

Representation learning from multi-modal data (e.g. graphs, texts and etc), including graph neural networks with attentions from edge textual channels, learning user representation and personalized topical compositions.

• Mentor: Hongning Wang

DiDi AI Lab

09/2015 - 05/2016

Machine Learning Intern

Studying the problem of estimating time of arrival (ETA) given origin-destination pair in a map, which is a core infrastructure for many downstream tasks, e.g. order assignment and price estimate.

• Mentor: Jieping Ye

Beihang Advanced Computing Technology Institutes

07/2014 - 09/2015

Research Assistant

Building a unified probabilistic model to predict traffic speed from multi-modal data, e.g. GPS, mobile trajectory and social media data.

• Mentors: Jianxin Li, Feng Chen

PUBLICATIONS

[1] Lu Lin, and Hongning Wang. "Graph Attention Networks over Edge Content-Based Channels." Proceedings of the 26th ACM SIGKDD International Conference on Knowledge Discovery & Data Mining (SIGKDD). 2020.

- [2] Gong, Lin, Lu Lin, Weihao Song and Hongning Wang. "JNET: Learning User Representations via Joint Network Embedding and Topic Embedding." Proceedings of the 13th International Conference on Web Search and Data Mining (WSDM). 2020.
- [3] Lu Lin, Zhen Luo, Dezhi Hong and Hongning Wang. "Sequential learning with active partial labeling for building metadata." Proceedings of the 6th ACM International Conference on Systems for Energy-Efficient Buildings, Cities, and Transportation (BuildSys). 2019.
- [4] Lu Lin, Lin Gong, and Hongning Wang. "Learning Personalized Topical Compositions with Item Response Theory." Proceedings of the Twelfth ACM International Conference on Web Search and Data Mining (WSDM). 2019.
- [5] Lu Lin, Jianxin Li, Feng Chen, Jieping Ye and Jinpeng Huai. "Road traffic speed prediction: a probabilistic model fusing multi-source data." IEEE Transactions on Knowledge and Data Engineering (TKDE) 30.7 (2017): 1310-1323.
- [6] Lu Lin, Jianxin Li, Richong Zhang and Chenggen Sun. "Opinion mining and sentiment analysis in social networks: a retweeting structure-aware approach." 2014 IEEE/ACM 7th International Conference on Utility and Cloud Computing (UCC). IEEE, 2014.

TEACHING
EXPERIENCES

Teaching Assistant	Spring 2020
Course: Graph Mining (Grad)	UVa
Teaching Assistant	Fall 2019
Course: Natural Language Processing (Grad)	UVa
Teaching Assistant	Spring 2019
Course: Text Mining (Grad)	UVa

INVITED TALKS

Representation Learning on Heterogeneous Graphs at LinkedIn LinkedIn 08/2020Graph Attention Networks over Edge Content-based Channels

International Conference on Knowledge Discovery & Data Mining

08/2020Graph Attention Networks over Edge textual Channels

LinkedIn

Learning User Representation via Joint Network Embedding and Topic **Embedding**

07/2020

02/2020International Conference on Web Search and Data Mining

Learning Personalized Topical Compositions with Item Response Theory International Conference on Web Search and Data Mining 02/2019

ACADEMIC **SERVICES**

Program Committee

- AAAI Conference on Artificial Intelligence (AAAI)
- International Joint Conference on Artificial Intelligence (IJCAI)

Conference Reviewer

- IEEE International Conference on Big Data (BigData)
- International Conference on Web Search and Data Mining (WSDM)

Journal Reviewer

• IEEE Transactions on Knowledge and Data Engineering (TKDE)

AWARDS

• SIGKDD 2020 Student Travel Award	08/2020
• WSDM 2019 Student Travel Award	02/2019
• SIGIR 2018 Student Travel Award	07/2018
• UVa Computer Science Fellowship	09/2017
• Beihang Computer Science Fellowship	09/2016
• Beihang Computer Science Fellowship	09/2015
• Outstanding Student Graduation Fellowship of Beijing City	06/2014
• Best Bachelor Thesis Award	06/2014
• Beihang Outstanding Student Fellowship	06/2012
• Beihang "Qian-Shen" Fellowship	04/2012
• Beihang Outstanding Student Fellowship	06/2011
• Third Prize in 22nd Undergraduate Mathematical Contest	04/2011