

Linchuan Xu

Cell Phone: +81 08021283655

Email: linchuan_xu@mist.i.u-tokyo.ac.jp

Office Address: Room No. 522, Faculty of Engineering Building 14, 7 Chome-3 Hongo, Bunkyo-ku, Tokyo 113-0033

Education

The Hong Kong Polytechnic University (PolyU), Hong Kong

Ph.D., Department of Computing, 2018

Thesis: Heterogeneous Information Fusion in Network Embedding for Data Mining Applications

Beijing University of Posts and Telecommunications (BUPT), Beijing, China

B.Eng., Department of Information and Communication Engineering, 2013

Thesis: On Consistency of Replica under Context of Distributed File Systems

Research Interests

Computational Disease, Network Embedding, Data Mining

Research Experience

The University of Tokyo, Tokyo, Japan

Project Researcher, from Aug. 2018 to now

Supervisor: Prof. Kenji Yamanishi

Research Focus: Application of Data Mining on Disease (Glaucoma Progression Prediction)

The Hong Kong Polytechnic University, Hong Kong

Ph.D. student, from 2013 to July 2018

Supervisor: Prof. Jiannong Cao

Research Focus: Heterogeneous Information Fusion in Network Embedding for Data Mining Applications

University of Illinois at Chicago, Chicago, Illinois, USA

Visiting student, from Sep. 2015 to July 2016

Supervisor: Prof. Philip S. Yu

Research Focus: Application of Data Mining on Networks

Awards

2018, PAKDD Student Travel Award

2017, DSAA Best Research Paper Award

2017, DSAA Student Travel Award

2017, WSDM Student Travel Award

Publications

Manuscript in Progress:

- [1.] **Linchuan Xu**, Jiannong Cao, Xiaokai Wei, Philip S. Yu, “Network Embedding via Coupled Kernelized Multi-dimensional Array Factorization”, IEEE Transactions on Knowledge and Data Engineering (Minor Revision).
- [2.] **Linchuan Xu**, Jing Wang, Lifang He, Jiannong Cao, Xiaokai Wei, Philip S. Yu, Kenji Yamanishi, “MiSep: A Framework for Embedding Heterogeneous Information Networks with Arbitrary Number of Node and Edge Types”, IEEE Transactions on Knowledge and Data Engineering (Under Review).

Conference Publications:

- [1.] Yuhui Zheng, **Linchuan Xu**, Taichi Kiwaki, Jing Wang, Hiroshi Murata, Ryo Asaoka, Kenji Yamanishi, “Glaucoma Progression Prediction Using Retinal Thickness via Latent Space Linear Regression”, to appear in KDD2019.
- [2.] Jing Wang, **Linchuan Xu**, Feng Tian, Atsushi Suzuki, Changqing Zhang, Kenji Yamanishi, “Attributed Subspace Clustering”, to appear in IJCAI2019.
- [3.] Jing Wang, Atsushi Suzuki, **Linchuan Xu**, Feng Tian, Liang Yang, Kenji Yamanishi, “Orderly Subspace Clustering”, to appear in AAAI2019.
- [4.] **Linchuan Xu**, Xiaokai Wei, Jiannong Cao, Philip S. Yu, “On Learning Community-specific Similarity Metrics for Cold-start Link Prediction”, IJCNN2018. July 8-13, Rio, Brazil.
- [5.] **Linchuan Xu**, Xiaokai Wei, Jiannong Cao, Philip S. Yu, “ICANE: Interaction Content Aware Network Embedding via Co-embedding of Nodes and Edges”, PAKDD2018. June 3-6, Melbourne, Australia.
- [6.] **Linchuan Xu**, Xiaokai Wei, Jiannong Cao, Philip S. Yu, “On Exploring Semantic Meanings of Links for Embedding Social Networks”, WWW 2018. April 23-27, Lyon, France. pp. 479-488.
- [7.] **Linchuan Xu**, Xiaokai Wei, Jiannong Cao, Philip S. Yu, “Multiple Social Role Embedding”, DSAA 2017. October 19-21, Tokyo, Japan. pp. 581-589.
- [8.] **Linchuan Xu**, Xiaokai Wei, Jiannong Cao, Philip S. Yu, “Multi-task Network Embedding”, DSAA 2017. October 19-21, Tokyo, Japan. pp. 571-580.
- [9.] **Linchuan Xu**, Xiaokai Wei, Jiannong Cao, Philip S. Yu, “Disentangled Link Prediction for Signed Networks via Disentangled Representation Learning” (*Best Research Paper*), DSAA 2017. October 19-21, Tokyo, Japan. pp. 676-685
- [10.] Xiaokai Wei, **Linchuan Xu**, Bokai Cao and Philip S. Yu, “Cross View Link Prediction by Learning Noise-resilient Representation Consensus”, WWW 2017. April 3-7, 2017. Perth, Australia. pp. 1611-1619.
- [11.] **Linchuan Xu**, Xiaokai Wei, Jiannong Cao, Philip S. Yu, “Embedding Identity and Interest for Social Networks” (*Poster*), WWW 2017. April 3-7, 2017. Perth, Australia. pp. 859-860.
- [12.] **Linchuan Xu**, Xiaokai Wei, Jiannong Cao, Philip S. Yu, “On Learning Mixed Community-specific Similarity Metrics for Cold-start Link Prediction” (*Poster*), WWW 2017. April 3-7, 2017. Perth, Australia. pp. 861-862.
- [13.] **Linchuan Xu**, Xiaokai Wei, Jiannong Cao, Philip S. Yu, “Embedding of Embedding (EOE): Joint Embedding for Coupled Heterogeneous Networks”, WSDM 2017. February 6-10, 2017. Cambridge, UK. pp. 741-749.

Journal Publications:

- [1.] **Linchuan Xu**, Xiaokai Wei, Jiannong Cao, Philip S. Yu, “Multi-task Network Embedding”, International Journal of Data Science and Analytics, 2018. pp. 1-16.
- [2.] **Linchuan Xu**, Xiaokai Wei, Jiannong Cao, Philip S. Yu, “ICANE: interaction content-aware network embedding via co-embedding of nodes and edges”, International Journal of Data Science and Analytics, 2018. pp. 1-14.