# Yingtong Dou (Ph.D. Candidate)

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Github

Education

Ph.D. University of Illinois at Chicago, Computer Science
 Advisor: Philip S. Yu
 Research Area: Graph Mining, Fraud Detection, Secure Machine Learning

**B.E.** Beijing Univ. of Posts and Telecoms. (BUPT), IoT Engineering Graduated with Beijing Excellent Graduate Award
Thesis: Robust Influence Maximization Algorithm Design for OSNs

Working Experience Research Intern Snap Inc.

Summer 2021

Mentor: Dr. Neil Shah

Project: Graph Neural Network and its Application

Research Intern Noah's Ark Research Lab

Summer 2018

Mentor: Dr. Zhenhua Dong

Project: Download Fraud Detection in Mobile App Markets

Research Assistant TDCS Lab, BUPT

2016 - 2017

Mentor: Dr. Xiaolong Deng

Project: Social Influence Measurement and Social Recommender System

**Preprints** 

[P3] H. Peng, R. Zhang, Y. Dou, R. Yang, J. Zhang, P. S. Yu. "Reinforced Neighborhood Selection Guided Multi-Relational Graph Neural Networks." *Under Review*, 2021. [arXiv:2104.07886]

[P2] L. Sun, Y. Dou, C. Yang, J. Wang, P. S. Yu, L. He and B. Li. "Adversarial Attack and Defense on Graph Data: A Survey." *Under Review*, 2020. [arXiv:1812.10528]

[P1] Y. Dou. "A Review of Recent Advance in Online Spam Detection." Technical Reports, 2019. [doi:10.13140/RG.2.2.34813.00485]

Selected Publications [C7] Y. Dou, K. Shu, C. Xia, P. S. Yu and L. Sun. "User Preference-aware Fake News Detection." *ACM SIGIR*, 2021. [doi:10.1145/3404835.3462990]

[C4] Y. Dou, Z. Liu, L. Sun, Y. Den, H. Peng, and P. S. Yu. "Enhancing Graph Neural Network-based Fraud Detectors against Camouflaged Fraudsters." *ACM CIKM*, 2020. [doi:10.1145/3340531.3411903]

[C3] Y. Dou, G. Ma, P. S. Yu, and S. Xie. "Robust Spammer Detection by Nash Reinforcement Learning." ACM SIGKDD, 2020. [doi:10.1145/3394486.3403135]

[C1] Y. Dou, W. Li, Z. Liu, Z. Dong, J. Luo, and P. S. Yu. "Uncovering Download Fraud Activities in Mobile App Markets." *IEEE/ACM ASONAM*, 2019. [doi:10.1145/3341161.3345306]

Other Publications

[C6] L. Yang, Z. Liu, Y. Dou, J. Ma and P. S. Yu. "ConsisRec: Enhancing GNN for Social Recommendation via Consistent Neighbor Aggregation." *ACM SIGIR*, 2021. [doi:10.1145/3404835.3463028]

[J3] J. Li, H. Peng, Y. Cao, Y. Dou, H. Zhang, P. S. Yu, L. He. "Higher-Order Attribute-Enhancing Heterogeneous Graph Neural Networks." *IEEE Trans. on Knowledge and Data Engineering*, 2021. [doi:10.1109/TKDE.2021.3074654]

[C5] Y. Cao, H. Peng, J. Wu, Y. Dou, J. Li, and P. S. Yu. "Knowledge-Preserving Incremental Social Event Detection via Heterogeneous GNNs." The Web Conference, 2021. [arXiv:2101.08747]

[C2] Z. Liu, Y. Dou, P. S. Yu, Y. Den, and H. Peng. "Alleviating the Inconsistency Problem of Applying Graph Neural Network to Fraud Detection." ACM SIGIR, 2020. [doi:10.1145/3397271.3401253]

[J2] X. Deng, Y. Yu, D. Guo and Y. Dou. "Efficient CPS Model Based Online Opinion Governance Modeling and Evaluation for Emergency Accidents." Springer, GeoInformatica, 2018. [doi:10.1007/s10707-018-0319-4]

[J1] X. Deng, Y. Dou, T. Lv, N. QVH. "A Novel Centrality Cascading Based Edge Parameter Evaluation Method for Robust Influence Maximization." *IEEE Access*, 2017. [doi:10.1109/access.2017.2764750]

### Professional Services

- Journal Reviewer: ACM TKDD, IEEE TKDE, ACM TIST, ACM TOIS, IEEE TNNLS, Information Processing and Management, Neurocomputing, Social Network Analysis and Mining
- PC Member: IJCAI'21,'22, ASONAM'21, AAAI'21, TrueFact@KDD'20
- External Reviewer: KDD'21, WWW'21, WSDM'21, KDD'20, BigData'19, CIKM'19

### **Invited Talks**

• F5 Research, Remote

May 2021

• Grab Inc., Remote

March 2021 October 2020

Beihang University, RemoteAI Tech Review, Remote

• Tencent, Shenzhen

August 2020

• Tencent, Snenzner

July 2018

## Teaching

- Teaching Assistant, CS341 Program Design and Implementation
- 21Spring

- Teaching Assistant, CS111 Program Design I
- 17Fall, 18Spring 20Fall
- Teaching Assistant, CS151 Mathematics for Computing
- 18Fall 19Spring

#### Honors and Awards

• Student Travel Awards: SIGIR'20, SIGKDD'20, CIKM'20