Yingtong Dou (Ph.D. Candidate)

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Google Scholar
Github

Education

Ph.D. University of Illinois at Chicago, Computer Science — 2017 - *present*
Advisor: Philip S. Yu
Research Area: Graph Mining, Fraud Detection, Secure Machine Learning

B.E. Beijing Univ. of Posts and Telecoms. (BUPT), IoT Engineering — 2017
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]

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]

[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]

[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]

[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]

[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]

[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
- Beihang University, Remote — October 2020
- AI Tech Review, Remote — August 2020
- Tencent, Shenzhen — 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