

YINGTONG DOU

801 South Morgan St. Chicago, IL, 60607, USA • <http://ytongdou.com> • ydou5@uic.edu • Tel: +1-312-785-5168

OBJECTIVE

Seeking data science/machine learning internship positions in Summer 2020, allowing me to utilize my knowledge in anomaly detection and network models while gaining practical experience in deploying algorithms in an industrial environment

EDUCATION

University of Illinois at Chicago

Chicago, IL.

Aug. 2017 – Present

- Ph.D. student in Computer Science
- **Advisor: Prof. Philip S. Yu**
- Research interests: Spam Detection / Social Network Analysis / Graph Mining

Beijing University of Posts and Telecommunications / Queen Mary University of London

Beijing, China

Sep. 2013 – June. 2017

- Bachelor's degree in Engineering with Beijing Excellent Graduate Award
- Thesis: Robust Influence Maximization Algorithm Design for Online Social Network

TECHNICAL SKILLS

Python (experienced), SQL (experienced), Apache Hive (experienced), PyTorch, Linux, TensorFlow, Matlab, C, Java

WORKING EXPERIENCE

Search and Recommendation Group, Noah's Ark Lab

Shenzhen, China

Research Internship

May. 2018 – Aug. 2018

- Investigated fraudsters working mechanism in mobile App download fraud
- Designed and implemented algorithms that successfully filter fraudsters in Mobile App Markets

Key Laboratory of Trustworthy Distributed Computing and Service, BUPT

Beijing, China

Research Assistant

Oct. 2015 – July. 2017

- Finished research works on recommender systems and influence maximization as a team leader
- Wrote two chapters as a member of the Chinese 973 project on Online Social Network Analysis

PUBLICATIONS

[C1] **Yingtong Dou**, Weijian Li, Zhirong Liu, Zhenhua Dong, Jiebo Luo, and Philip S. Yu "Uncovering Download Fraud Activities in Mobile App Markets." *ASONAM*, 2019. [[arXiv:1907.03048](https://arxiv.org/abs/1907.03048)]

[J2] Xiaolong Deng, Yinluan Yu, Danhua Guo, and **Yingtong Dou**. "Efficient CPS model based online opinion governance modeling and evaluation for emergency accidents." *GeoInformatica*, vol. 68, no. 2, p. 109, Apr. 2018. [[doi: 10.1007/s10707-018-0319-4](https://doi.org/10.1007/s10707-018-0319-4)]

[J1] Xiaolong Deng, **Yingtong Dou**, Tiejun Lv, Nguyen QVH. "A Novel Centrality Cascading Based Edge Parameter Evaluation Method for Robust Influence Maximization." *IEEE Access*. 2017; 5:22119-22131. [[doi:10.1109/access.2017.2764750](https://doi.org/10.1109/access.2017.2764750)]

WORKING PAPERS

Defending Spam Detectors against Goal-oriented Spammers (submitted to WSDM 2020)

Explainable Spam Detection via Heterogeneous Network

PROJECTS

Explainable Graphical Model and Its Application to Spam Detection

Aug. 2019 – Present

- Toward designing more interpretable and scalable graph representation learning models
- Leverage rich information from text and metadata to generate explanations for detected spam reviews

Securing Graphical Classification Models

Feb. 2018 – Aug. 2019

- Attacked the state-of-the-art graphical classifiers with multiple approaches
- Proposed a robust graphical classifier against adversarial examples

Suspicious Behavior Modeling in Mobile App Markets

June. 2018 – Apr. 2019

- Investigated various kinds of fraudsters like bots, spammers and crowd workers in mobile app markets
- Selected a bunch of informative features which could efficiently distinguish fake downloads/installs