Yifei, ZHANG

CONTACT INFO
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EDUCATION

Chinese University of Hong Kong Aug. 2020 - July 2024 (Excepted)
Ph.D. Student of Computer Sci. & Eng. advised by Prof. Irwin King HongKong, China

Australian National University July 2016 - July 2018
M.S. in Computer Science Canberra, Australia

ZhengZhou University Sep. 2012 - July 2016
B.S. in Electrical Engineering ZhengZhou, China

EXPERIENCE

Alibaba Group Hangzhou, China
Senior R& D Engineer May 2019 - Aug. 2020

- Improve the information retrieval system of Taobao.
- Model user shopping behavior via Graph Neural Network(GNN) for online recommendation.

JD.com July 2018-May 2019
R& D Engineer Beijing, China

- Applied machine learning and data mining techniques on big data to assist business development in the area of financial fraud detection, recommendation system, and social graph analytic.
- Developed a series of Privacy-Preserving Machine Learning (PPML) techniques[8] that fit General Data Protection Regulation (GDPR). (Partial solutions have been public and implemented by an open source project(FATE.)

Data61 (Previously known as NICTA) Canberra, Australia
Research Intern Nov. 2016 - Mar. 2017

- Work on the project of building social bot detection systems via graph neural network
- Develop method quantifying the role and influence of social bots in the democratic process[6].

CONFERENCE PUBLICATIONS

[1] **Zhang Y**., Zhu, H., Song, Z., Koniusz, P. and King, I., 2022, April. Graph-adpative Rectified Linear Unit for Graph Neural Networks. In Proceedings of The Web Conference 2022 **(TheWebConf'22)**.

[2] Song, Z., Meng, Z., **Zhang, Y.**, & King, I. (2021, October). Semi-supervised Multi-label Learning for Graph-structured Data. In Proceedings of the 30th ACM International Conference on Information & Knowledge Management (**CIKM'21**).

[3] **Zhang, Y.** and Zhu, H., (2020, May). Discrete Wasserstein Autoencoders for Document Retrieval,. In 2020 IEEE International Conference on Acoustics, Speech and Signal Processing **ICASSP'20)**

[4] **Zhang, Y.** and Zhu, H., (2019, June). Doc2hash: Learning Discrete Latent variables for Documents Retrieval. In Proceedings of the 2019 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, (**NAACL'19**)

[5] **Zhang, Y.** and Zhu, H. Deep Neural Network for Asymmetrically Collaborative Machine Learning with Additively Homomorphic Encryption In The 1st International Workshop on Federated Machine Learning for User Privacy and Data Confidentiality **(FML-IJCAI'19)**

[6] Rizoiu, M. A., Graham, T., Zhang, R., **Zhang, Y.**, Ackland, R., Xie, L. (2018, June). #DebateNight: The Role and Influence of Socialbots on Twitter During the 1st 2016 US Presidential Debate. In Twelfth International AAAI Conference on Web and Social Media. **(ICWSM'18)**

ARXIV PREPRINT

[7] Chen, Y., **Zhang, Y.**, Zhang, Y., Guo, H., Li, J., Tang, R., He, X. and King, I., 2021. Towards Low-loss 1-bit Quantization of User-item Representations for Top-K Recommendation. arXiv preprint. arXiv:2112.01944.

[8] **Zhang**, Y. and Zhu, H., 2020. Additively homomorphical encryption based deep neural network for asymmetrically collaborative machine learning. arXiv preprint arXiv:2007.06849.

TEACHING

- CSCI3150: Computer Science and society — Spring 2022
- CSCI5650: Graph Neural Networks — Autumn 2021
- CSCI3150: Computer Science and society — Spring 2021
- CSCI1130: Introduction to Computing Using Java — Autumn 2020

ACADEMIA SERVICES

- External Reviewer for conferences: WebConf(WWW)'22, AAAI'21, CIKM'21, NIPS'21.
- External Reviewer for journals: TKDE, Neurocomputing

AWARD

- Hong Kong Postgraduate Studentships — Autumn 2020
- Notional Scholarship — Autumn 2015