JINNING LI

PhD in Computer Science, University of Illinois at Urbana-Champaign

University of Illinois at Urbana-Champaign EDUCATION

Aug 2020 - May 2025

Ph.D. Candidate in Computer Science. Advisor: Prof. Tarek Abdelzaher.

University of Illinois at Urbana-Champaign

Aug 2020 - Dec 2022

M.S. in Computer Science. Advisor: Prof. Tarek Abdelzaher.

Shanghai Jiao Tong University

Sep 2015 - Jun 2019

B.S. in Computer Science (ACM Honors Class). Advisors: Prof. Yong Yu and Prof. Xiaofeng Gao.

RESEARCH **INTERESTS**

Social Networks, Data Mining, Graph Mining, Natural Language Processing Recommender Systems, Computer Vision, Autonomous Driving

Industry

Twitter | Applied Research Intern Cortex Research Team

May - Aug 2022

 Enhanced tweet representation learning with a large-scale knowledge graph embedding of non-textual units. Achieved 2%-5% improvements on downstream tasks including hashtag/topic/sentiment prediction and information extraction. Published a paper. 🗗

Pony.ai | Machine Learning Engineer (Full-Time) Perception Team Jul 2019 - Aug 2020

- Fused obstacles (cars, trucks, pedestrians, cyclists) classification system with ResNet and Random Forest, and deployed the model inference with NVIDIA TensorRT.
- Real-time obstacle trajectory prediction for driveway with Random Forest and Recurrent Neural Networks. Reduced 8% disengagement and hard brake issues.

YITU Tech | Research Intern Face Recognition Team

Feb - Jun 2019

• Improved face verification accuracy by 4.8% with the proposed identification-preserving super-resolution algorithm. Published a paper. 🚨

Publications Unsupervised Belief Representation Learning with Variational Graph Auto-Encoders 🚨 📢 Jinning Li, Huajie Shao, Dachun Sun, R. Wang, Y. Yan, J. Li, S. Liu, H. Tong, T. Abdelzaher In International ACM SIGIR Conference (SIGIR) 2022

> NTULM: Enriching Social Media Text Representations with Non-Textual Units 🚨 Jinning Li*, Shubhanshu Mishra*, Ahmed El-Kishky, Sneha Mehta, Vivek Kulkarni In W-NUT Workshop at International Conference on Computational Linguistics (COLING) 2022

> Learning to Sample and Aggregate: Few-shot Reasoning over Temporal Knowledge Graph 📙 Ruijie Wang, Zheng Li, Dachun Sun, Shengzhong Liu, Jinning Li, Bing Yin, Tarek Abdelzaher In Thirty-sixth Conference on Neural Information Processing Systems (NIPS) 2022

> Cost Function Learning in Memorized Social Nets with Cognitive Behavioral Asymmetry 🕒 Yanbing Mao, Jinning Li, Naira Hovakimyan, Tarek Abdelzaher, Christian Lebiere In IEEE Transactions on Computational Social Systems (TCSS) 2022

Dissecting Cross-Layer Dependency Inference on Multi-Layered Inter-Dependent Nets 🔁 Yuchen Yan, Qinghai Zhou, Jinning Li, Tarek Abdelzaher, and Hanghang Tong In International Conference on Information and Knowledge Management (CIKM) 2022

Scribble-to-Painting Transformation with Multi-Task Generative Adversarial Networks 🚨 🗘 **Jinning Li**, Yexiang Xue

In International Joint Conference on Artificial Intelligence (IJCAI) 2019

Senti2Pop: Sentiment-Aware Topic Popularity Prediction on Social Media 📙 Jinning Li, Yirui Gao, Xiaofeng Gao, Yan Shi, Guihai Chen In IEEE International Conference on Data Mining (ICDM) 2019 DancingLines: An Analytical Scheme to Depict Cross-Platform Event Popularity 🚨 📢 Tianxiang Gao, Weiming Bao, Jinning Li, X. Gao, B. Kong, Y. Tang, G. Chen, X. Li In International Conference on Database and Expert Systems Applications (DEXA) 2018 ID Preserving Face Super-Resolution Generative Adversarial Networks 🚨 🗘 Jinning Li, Yichen Zhou, Jie Ding, Cen Chen, Xulei Yang In IEEE Access 2020 Research University of Illinois at Urbana-Champaign Social Sensing, Data Mining, NLP EXPERIENCE **Ph.D. Student**. Advisor: Prof. Tarek Abdelzaher Aug 2020 - Present • Unsupervised belief representation learning with VGAE on polarized networks. Developed DARPA Influence Campaign Awareness and SenseMaking system. Purdue University Computer Vision, GANs **Research Intern**. Advisor: Prof. Yexiang Xue Sep - Dec 2018 • Oil painting arts generation with multi-task generative adversarial networks. Cornell University Counterfactual Machine Learning, Recommendation Systems **Research Intern**. Advisor: Prof. Thorsten Joachims Jul - Aug 2018 Rank 1 in Criteo Advertisement Placement Competition with the proposed model. Shanghai Jiao Tong University Data Mining for Social Networks Research Assistant. Advisor: Prof. Xiaofeng Gao Jul 2017 - Jun 2019 • Cross-platform social popularity quantification and alignment. • Sentiment-aware topic popularity prediction on social media. Honors Zhiyuan International Research Scholarship (First Prize). 2019 Han-Ying-Ju-Hua Scholarship. 2018 Academic Excellence Scholarship of SJTU (First Prize). **Awards** 2017, 2018 International Interdisciplinary Contest in Modeling (Meritorious Winner). 2017 Zhiyuan Honorary Scholarship. 2016, 2017 International Mathematical Contest in Modeling (Outstanding Winner). 2015 Dongrun-Yau International High School Science Award. 2015 Academic Teaching Assistant at CS122: Programming Teaching Assistant at CS307: Operating System Services *Program Committee* at AAAI Conference Programming C, C++, Java, Python (TensorFlow, PyTorch, MXNet) Proficiencies SQL, BigQuery, HTML, Javascript, Matlab, ŁTfX,

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