

XUEJIAN WANG

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EDUCATION

Carnegie Mellon University

Pittsburgh, USA

- Joint PhD student in Machine Learning(Expected) and Public Policy Sep. 2018 - Present
- Advisor: Prof. Leman Akoglu

Shanghai Jiao Tong University (SJTU)

Shanghai, China

- B.S in Information Security Sep. 2014 - Jun. 2018
- Research Assistant, APEX Data & Knowledge Management Lab
- Advisor: Prof. Weinan Zhang, Prof. Yong Yu and Prof. Jun Wang(University College London)

RESEARCH INTERESTS

My research interest lie in the broad areas of machine learning including deep learning and representation learning, as well as their applications in natural language processing, recommender systems and anomaly detection.

PUBLICATIONS

Large-scale Interactive Recommendation with Tree-structured Policy Gradient

- Haokun Chen, Xinyi Dai, Weinan Zhang, Han Cai, **Xuejian Wang**, Ruiming Tang, Yuzhou Zhang, Yong Yu
- In *Proceedings of the 33rd AAAI Conference on Artificial Intelligence (AAAI-19)*. **AAAI, 2019**

Neural Link Prediction over Aligned Networks

- Xuezhi Cao, Haokun Chen, **Xuejian Wang**, Weinan Zhang, and Yong Yu.
- In *Proceedings of the 32nd AAAI Conference on Artificial Intelligence (AAAI-18)*. **AAAI, 2018**

Dynamic Attention Deep Model for Article Recommendation by Learning Human Editors' Demonstration

- **Xuejian Wang***, Lantao Yu*, Kan Ren, Guanyu Tao, Weinan Zhang, Yong Yu, Jun Wang.
- In *Proceedings of the 23rd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining. KDD 2017*

RESEARCH EXPERIENCES

Detecting Unseen Risk Class in Online Textual Data

Sep. 2018 - Present

Advisor: Prof. Leman Akoglu

DATA Lab, CMU

- Detecting emerging risk class from large corpus of text on the Internet, mainly news and twitters
- Generalizing algorithm to other similar datasets. Still ongoing

Large-scale Interactive Recommendation via Reinforcement Learning

Dec. 2017 - April. 2018

Advisor: Prof. Weinan Zhang

APEX Data & Knowledge Management Lab, SJTU

- This study focuses on large discrete action space problem in reinforcement learning based recommender systems
- Employing a Tree-structured Policy Gradient Recommendation (TPGR) framework to accelerate sampling

Neural Link Prediction over Aligned Networks

Aug. 2017 - Sep. 2017

Advisor: Prof. Yong Yu

APEX Data & Knowledge Management Lab, SJTU

- Implemented *LINE* in Tensorflow for comparison and tuned parameters to best performance
- Revised the whole paper and contributed over 100 submits
- Surveyed papers about social networks and proposed attention based framework which we left as future work

Dynamic Attention Deep Model for Article Recommendation by Learning Human Editors' Demonstration Oct. 2016 - Feb. 2017

Advisor: Prof. Weinan Zhang

APEX Data & Knowledge Management Lab, SJTU

- Built a text classification network to model the editors' underlying criterion varied with many factors such as time, current affairs, etc., for a famous Chinese media website
- Employed attention mechanism to address data drift problem, resulting in more robust and stable predictions
- Proposed a Dynamic Attention Deep Model (DADM) which outperformed other baselines in an A/B test
- Our paper was accepted to KDD 2017 and the proposed DADM model was utilized in practical cases, automating the quality article selection process to alleviate the editors' working load

PROFESSIONAL ACTIVITIES

External Reviewer

WWW Journal

INTERNSHIP EXPERIENCE

ULU Technologies Inc.

Nov. 2016 - Feb. 2017

R&D Engineer Intern

- Developed a practical algorithm for article recommendation which is used in production
- Improved coding ability, learned how to independently conduct experiments and developed communication skills

HONORS & AWARDS

CMU Presidential Fellowship

2018

SJTU Outstanding Graduate

2018

KDD Student Travel Award

2017

Rongchang Science and Technology Innovation Scholarship (Nomination)

2017

SJTU Excellent Scholarship

2017&2016

SJTU Excellent Student Award (Top 5%)

2017&2016

Second Prize, China Undergraduate Mathematical Contest in Modeling 2016, Shanghai

2016

SKILLS

Machine Learning:

Tensorflow(mainly), Pytorch, XGBoost, Sklearn, Keras

Programming Languages:

Python, MATLAB, C++, R, Verilog and L^AT_EX

LEADERSHIP & EXTRACURRICULAR ACTIVITIES

Student Union of School

May 2015 - May 2016

Minister of Publicity Department

Student Union of SJTU

Nov. 2015 - Feb. 2016

Minister of Communication Department of the Committee

Outstanding Volunteers

Shanghai International Marathon (2014&2016), SJTU 120th Anniversary