XUEJIAN WANG

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EDUCATION

Carnegie Mellon University — **Pittsburgh, USA**
- Joint PhD student in Machine Learning 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 deep learning and representation learning, as well as their applications in recommender systems, natural language processing and anomaly detection. For more information, please view xuejianwang.com.

HONORS & AWARDS

CMU Presidential Fellowship 2018 - 2019
SJTU Outstanding Graduate 2018
KDD 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

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

SKILLS

Machine Learning: Tensorflow(primary), Pytorch, XGBoost, Sklearn, Keras
Programming Languages: Python(primary), MATLAB, C++, R, Verilog and LaTeX