XUEJIAN WANG

(+1) 412-251-1130 ⋄ xuejianwang.com ⋄ xuejianw@andrew.cmu.edu

RESEARCH INTERESTS

The broad areas of machine learning including deep learning, reinforcement learning and applications in various domains such as recommender systems and network embeddings. In general:
- Mining underlying patterns of human interaction and behaviors
- Designing efficient and effective learning algorithms to solve real-world problems

EDUCATION

Carnegie Mellon University   **Pittsburgh, USA**
- Joint PhD 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)

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*(equal contribution), 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

Personalized Article Recommendation   Sep. 2017 - Dec. 2017
Advisor: Prof. Weinan Zhang   *APEX Data & Knowledge Management Lab, SJTU*
- This study focuses on recommending most relevant textual advertisements to users to maximize the Click-Through-Rate, in which the major challenge is how to match user interests with proper articles
- Employing hierarchical attention mechanism to obtain article embeddings and construct user interests

Neural Link Prediction over Aligned Networks   Aug. 2017 - Sep. 2017
Advisor: Prof. Yong Yu   *APEX Data & Knowledge Management Lab, SJTU*
- Implemented baseline *LINE: Large-scale Information Network Embedding* in Tensorflow for comparison and tuned parameters to best performance
- Revised the whole paper for 3 times and contributed over 100 submits
- Surveyed papers about social networks and extended the idea of two aligned networks to multi-aligned networks 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

Review Activities   CIKM 2017, WSDM 2018, AAAI 2018, SIGIR 2018

· Gave reviews for paper submissions in relevant domains for reference, which were mostly adopted
· Learnt how to evaluate academic papers from a reviewer perspective and developed tastes for papers

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
KDD Student Travel Award	2017
Rongchang Science and Technology Innovation Scholarship (Nomination)	2017

· Top 30 undergraduate scholars in Shanghai Jiao Tong University

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, XGBoost, Keras
Programming Languages:	Python, MATLAB, C++, R, Verilog and LaTeX
Standard Tests:	TOEFL: 104 (R26, L27, S22, W29) , GRE: V153, Q170, W3.5

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