XUEJIAN WANG

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EDUCATION

Carnegie Mellon University <div align="right">**Pittsburgh, USA**</div>
· Joint PhD student in Machine Learning(Expected) and Public Policy <div align="right">Sep. 2018 - Present</div>

Shanghai Jiao Tong University (SJTU) <div align="right">**Shanghai, China**</div>
B.S in Information Security <div align="right">Sep. 2014 - Jun. 2018</div>
· Research Assistant, APEX Data & Knowledge Management Lab
· Advisor: Prof. Weinan Zhang, Prof. Yong Yu and Prof. Jun Wang(University College London)

RESEARCH INTERESTS

I am broadly interested in developing novel deep learning models, applying them to real-world problems and understanding how it works empirically and theoretically.

PUBLICATIONS

Combining Machine Learning Models and Scores Using combo library
· Yue Zhao, **Xuejian Wang**, Cheng Cheng, Xueying Ding
· In *Proceedings of the 34th AAAI Conference on Artificial Intelligence (AAAI-20)*. **AAAI, Demo track, 2020**

Continual Rare-Class Recognition with Emerging Novel Subclasses
· Hung Nguyen, **Xuejian Wang**, Leman Akoglu
· In **ECML PKDD, 2019**

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

Continual Rare-Class Recognition with Emerging Novel Subclasses <div align="right">Oct. 2018 - Apr. 2019</div>
Advisor: Prof. Leman Akoglu <div align="right">*DATA Lab, CMU*</div>
· Detecting emerging novel classes of interest from news articles, including major classes and rare(risky) classes
· Rejecting unseen risk class documents to one class
· Submitted to ECML-PKDD 2019

Large-scale Interactive Recommendation via Reinforcement Learning <div align="right">Dec. 2017 - April. 2018</div>
Advisor: Prof. Weinan Zhang <div align="right">*APEX Data & Knowledge Management Lab, SJTU*</div>
· 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

Amazon.com   Jun. 2019 - Aug. 2019
Applied Scientist Intern   *Advisor: Dr. Jim Huang*
- Developed a customer embedding generation framework for accelerating recommender system inference
- Achieved 4x acceleration with less than 1% accuracy loss on Amazon production dataset

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($24000)	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, PyTorch, MXNet, XGBoost, Sklearn, Keras
Programming Languages:	Python, C++, MATLAB, R, Verilog and LaTeX

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