# **XUEJIAN WANG**

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#### RESEARCH INTERESTS

The broad areas of machine learning and applications in various domains such as recommender system, social networks, etc. In general, my research aims to: (a)mining underlying patterns of human interaction and behaviors; (b)developing practical algorithms and scalable tools to promote social good.

#### **EDUCATION**

Shanghai Jiao Tong University (SJTU), Shanghai, China School of Electronic Information and Electric Engineering Major in Cyberspace Security Sep. 2014 - Aug. 2018(expected) GPA:3.45/4.0 (Junior GPA 3.56/4.0, Ranked 18/101)

#### **PUBLICATIONS & PATENTS**

[1] Xuejian Wang, Lantao Yu, Kan Ren, Guanyu Tao, Weinan Zhang, Yong Yu, Jun Wang, "Dynamic Attention Deep Model for Article Recommendation by Learning Human Editors Demonstration", accepted to *Proc. ACM KDD*, 2017

[2] Xuezhi Cao, Haokun Chen, **Xuejian Wang**, Weinan Zhang, Yong Yu, "Neural Link Prediction over Aligned Networks", submitted to *Proc. AAAI*, 2018

#### RESEARCH EXPERIENCE

# 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

- · This task is, essentially, a binary classification problem for articles, in which the major challenge is modeling the editors' underlying criterion varied with many factors such as time, current affairs, etc.
- · 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 on trial, automating the quality article selection process to alleviate the editors' working load

## Neural Link Prediction over Aligned Networks

Aug. 2017 - Sep. 2017

Advisor: Prof. Yong Yu

APEX Data & Knowledge Management Lab, SJTU

- · This study explored link prediction over aligned networks, which are common in real world, yet little studied. The major challenge is the heterogeneousness of the considered networks, which could be addressed well by our proposed model.
- · Implemented baseline LINE: Large-scale Information Network Embedding in Tensorflow and tuned parameters
- · Surveyed papers about social networks and contributed lots of submits to our final paper
- · Extended the idea of two aligned networks to multi-aligned networks which we left as future work

#### Personalized Article Recommendation

Sep. 2017 - Present

Advisor: Prof. Young Yu

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 previous interests

### INTERNSHIP EXPERIENCE

#### ULU Technologies Inc.

Nov. 2016 - May 2017

R&D Engineer Intern

- · Developed a practical algorithm for article recommendation which is on trial
- · Improved coding ability, learned how to independently conduct experiments and developed communication skills
- $\cdot$  Got a main understanding of how AI start-up works

#### **AWARDS**

· KDD Student Travel Award (1.3K USD)	2017
· Excellent Student Award (Top 5%)	2016
· Excellent Scholarship C	2017&2016
· Second Prize, province-level CUMCM 2016	2016
· Second Prize, "Data Bang" Data Innovation Contest	2015
· Outstanding Undergraduate Practical Program (Top 5%)	2015

#### **SKILLS**

Machine Learning: Tensorflow, Scikit-Learn, SciPy, NumPy, xGBoost, Keras

Programming Languages: Python, MATLAB, C++, R, Verilog and LATEX

# LEADERSHIP & EXTRACURRICULAR ACTIVITIES

SEIEE Student Union May 2015 - May 2016

Minister of Publicity Department

SJTU Student Union Nov. 2015 - Feb. 2016

Minister of Communication Department of the Committee

Review Activities CIKM 2017, WSDM 2018, AAAI 2018

 $\cdot$  Gave reviews for paper submissions in relevant domains for reference, which were mostly adopted

· Learnt how to evaluate academic papers from a review perspective and developed tastes for papers