YULE WANG

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EDUCATION

Shanghai Jiao Tong University (SJTU), Shanghai, P.R.China

M.S. in Computer Science *Aug, 2019 – Jul, 2022*

- **GPA: 3.9/4.0, Ranking: 1^{st}/88**

Shanghai Jiao Tong University (SJTU), Shanghai, P.R.China

B.E. in Computer Software Engineering *Aug, 2015 – Jul, 2019*

- **GPA: 3.7/4.0, Ranking: 19^{th}/101**

SCHOLARSHIPS & AWARDS

- **2020 Huawei Scholarship** (Highest honor in the Dept. of Computer Science, **3 out of 112**)
- **2019 Excellent Undergraduate Student Scholarship** (SJTU, **0.6%**)
- **2018 Baidu Scholarship** (Highest honor in the Dept. of Software Engineering, **9 out of 262**)
- **2018 Champion** in the **Intel Electronic Design Competition** (**1 out of 221**)
- **2017 First Prize** in the **China National IoT Design Competition** (**1%**)

PUBLICATIONS & MANUSCRIPTS

1 **Yule Wang**, Xin Xin, Yue Ding, Dong Wang. ICMT: Item Cluster-Wise Multi-Objective Training for Long-Tail Recommendation. Submitted to *2022 ACM Transactions on Information Systems (TOIS)*. Under review. [arXiv]

2 **Yule Wang**, Qiang Luo, Yue Ding, Dong Wang, Hongbo Deng. DemiNet: Dependency-Aware Multi-Interest Network with Self-Supervised Graph Learning for Click-Through Rate Prediction. *The ACM Web Conference 2022 (WWW)*. Under review. [arXiv]

3 Yunzhe Li, Yue Ding, Bo Chen, Xin Xin, **Yule Wang**, Yuxiang Shi, Ruiming Tang, Dong Wang. Extracting Attentive Social Temporal Excitation for Sequential Recommendation. Accepted by *30th ACM International Conference on Information and Knowledge Management (CIKM)*.

4 Yuxiang Shi, **Yule Wang**, Yue Ding, Dong Wang. Task Aligned Meta-learning based Contrastive Graph for Cold-Start Recommendation. *The ACM Web Conference 2022 (WWW)*.

5 Bo Chen, Yue Ding, Xin Xin, **Yule Wang**, Dong Wang. AIRec: Attentive intersection model for tag-aware recommendation. Accepted by *2021 Neurocomputing*. [ScienceDirect]

6 **Yule Wang**, Xubo Yang. Omni-directional ORB-SLAM2 for mobile robots. Accepted by *2018 IEEE CSAA Guidance, Navigation and Control Conference (CGNCC)*. [IEEE]

RESEARCH INTEREST

Fields Data Mining, Information Retrieval, Graph Mining, Fairness and Debiasing in AI

Methods Deep Learning, Sequence Modeling, Graph Neural Networks, Causal Inference

SELECTED RESEARCH PROJECTS

Alibaba Group, Beijing, P.R.China
Data Analytics and Intelligence Lab, DAMO Academy *May, 2021 – Sep, 2021*
Research Assistant, Advisor: Dr. Hongbo Deng
Project: DemiNet: Dependency-Aware Multi-Interest Network with Self-Supervised Graph Learning for Click-Through Rate Prediction.

- Propose a novel algorithm for user diverse interests modeling in e-commerce advertising systems
- Perform user multi-route interest extraction by constructing dependency-aware heterogeneous graph from user behavior sequence and capturing interests from it through semi-supervised learning.
- Design multi-route interest aggregation structure through adaptive mixture of interest experts.

Shanghai Jiao Tong University, Shanghai, P.R.China
Data Mining and IoT Group, Department of Computer Science *Mar, 2020 – May, 2021*
Academic Master, Advisors: Profs. Dong Wang & Liqing Zhang
Project: ICMT: Item Cluster-Wise Multi-Objective Training for Long-Tail Recommendation

- Observe the gradient dominance problem in traditional recommendation models and propose a model-agnostic framework mitigating the popularity bias issue from an optimization perspective
- Employ counterfactual inference for removing the conformity factor in the network
- Consider the learning over whole training data as a weighted aggregation of multiple item cluster-wise objectives, resolving it through Pareto-Efficiency Solver and obtaining harmonious gradient direction

Project: AIRec: Attentive Intersection Model for Tag-aware Recommendation

- Capture user preference through hierarchical attention, where the item-level attention differentiates the contributions of interacted items and the preference-level attention discriminates the saliencies between explicit and implicit preferences.
- The intersection between user and item tags is exploited to enhance the learning of conjunct features.

INTERNSHIP EXPERIENCE

ByteDance, Shanghai, P.R.China
Natural Language Processing (NLP) Research Intern *Dec, 2019 – Mar, 2020*

- Develop and enhance the performance of smart dialog system in TikTok app. Optimizing the accuracy of question recognition and classification at the main search entry based on ALBERT (Recall +0.56%)
- Performing SRL (Semantic Role Labeling) of user query in Q&A service based on ELECTRA, enhancing the user satisfaction rate (Ratio +1.71%).

PROGRAMMING SKILLS

Proficient	Python, C/C++, TensorFlow, SQL (MySQL), Latex, MATLAB
Familiar	Linux, Java, Pytorch, Keras, Git, Markdown, etc.

LANGUAGE SKILLS

TOEFL iBT	104/120 (Reading 28, Listening 27, Speaking 24, Writing 25)
GRE	322/340+3.5/6.0 (Verbal 152, Quantitative 170, Analytical Writing 3.5)