ZHENGXIAO DU

+86 18800129761 duzx16@mails.tsinghua.edu.cn

Department of Computer Science and Technology

Tsinghua University, P.R. China

EDUCATION

Tsinghua University Fall 2016 - Fall 2020
B.S. in Computer Science *Beijing, P.R. China*

- GPA: 3.91/4.00 (Rank 1/158); admitted on basis of performance on national college admission exam $(3/330,000)$
- Awarded the *Elite Collegiate Award* by China Computer Federation (outstanding academic performance and research experience, 73 winners nationwide)
- Selected to *Spark Innovative Talent Cultivation Program* in Tsinghua University (Top 3%, on basis of outstanding research performance)
- Visiting student to Cornell University in 2019

PUBLICATION

1. **Zhengxiao Du**, Xiaowei Wang, Hongxia Yang, Jingren Zhou, and Jie Tang. "Sequential Scenario-Specific Meta Learner for Online Recommendation." *International Conference on Knowledge Discovery and Data Mining* (KDD), p. 2895-2904, 2019.
2. Yifeng Zhao, Jie Tang, and **Zhengxiao Du**. "EFCNN: A Restricted Convolutional Neural Network for Expert Finding." *Pacific-Asia Conference on Knowledge Discovery and Data Mining* (PAKDD), p. 96-107, 2019.
3. **Zhengxiao Du**, Jie Tang, and Yuhui Ding. "POLAR: Attention-Based CNN for One-Shot Personalized Article Recommendation." *European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases* (ECML/PKDD), p. 675-690, 2018.

    Under Review:

1. Himank Yadav[1], **Zhengxiao Du**[1], Thorsten Joachims. "Learning Fair Ranking Policies from Biased Feedback." (Under review in *The Web Conference* [WWW] 2020.)
2. **Zhengxiao Du**, Chang Zhou, Ming Ding, Hongxia Yang, and Jie Tang. "CogGraph-KR: One-shot Relational Reasoning for Knowledge Graph Completion." (Under review in WWW 2020.)
3. **Zhengxiao Du**, Jie Tang and Yuhui Ding. "POLAR++: Active One-shot Personalized Article Recommendation." (Under Review in *IEEE Transactions on Knowledge and Data Engineering* [TKDE].)

RESEARCH EXPERIENCE

Department of Computer Science, Cornell University June 2019 - Sept 2019
Research Assistant to Professor Thorsten Joachims *Ithaca, USA*

- Designed a learning-to-rank algorithm to learn the ranking policy from implicit feedback with fairness constraints and completed empirical evaluations. A first-author (equal contribution) paper is under review in *The Web Conference* (WWW) 2020.

Department of Computer Science and Technology, Tsinghua University June 2017 - June 2019
Research Assistant to Professor Jie Tang *Beijing, China*

- Proposed an attention-based Convolutional Neural Network (CNN) for related article recommendations, combined a one-shot function to provide personalized recommendations and completed empirical evaluations. A first-author paper was accepted by ECML/PKDD 2018.

---

[1]Equal contribution

- Extended the previous CNN article recommender model with active learning to solve the cold-start problem in article recommendations and completed empirical experiments. A first-author paper is under review in TKDE.
- (*Collaborating with Alibaba*) Applied meta learning to solve scenario-aware recommendations in cold-start scenarios and completed empirical experiments. A first-author paper was accepted by KDD 2019.
- (*Collaborating with Alibaba*) Proposed a novel algorithm to infer new facts from existing knowledge graphs with explainable reasoning processes, especially on relation types with only a few training instances and completed empirical experiments. A first-author paper is under review in WWW 2020.
- Helped to run the experiment on one of the three datasets in the paper "EFCNN: A Restricted Convolutional Neural Network for Expert Finding", which was accepted by PAKDD 2019.

SELECTED AWARDS AND HONORS

- Elite Collegiate Award by China Computer Federation (73 winners nationwide, only 4 in Tsinghua)   2019
- Award for Comprehensive Quality in Tsinghua University (Top 5%, outstanding academic performance and research experience)   2019
- Award for Comprehensive Quality in Tsinghua University (Top 5%, outstanding academic performance and research experience)   2018
- Hongqian Electronics Scholarship in Tsinghua University   2017
- Freshman Scholarship (Top 10%, awarded due to excellent performance on national college admission exam) 2016

PROFESSIONAL AND EXTRACURRICULAR EXPERIENCE

DAMO Academy, Alibaba Group   Sept 2018 - June 2019
Intern   *Beijing, China*

- Designed the algorithm of personalized purchase recommendations for customers in different scenarios in the Guess-What-You-Like section on Taobao App.

Student Association of Science and Technology, Tsinghua University   Sept 2017 - June 2018
Committee Member   *Beijing, China*

- Organized weekly meetings to share advancements in computer science
- Helped to organize several technology contests, including a quantitative trading contest with Jane Street and Student Curricular Academic and Technology Works Contest in Tsinghua University.

ADDITIONAL INFORMATION

Interests

- Debate: Led the Computer Science Department's debate team in the campus debate contest in Tsinghua University at 2018

Language Skills

- **TOEFL**: 111 (Reading 30; Listening 29; Speaking 22; Writing 30)
- **GRE**: 332 (Verbal 162; Quantitative 170)

Programming Skills

- **Languages** Python, Java, C++, C, JavaScript, MATLAB, Bash
- **Machine Learning** PyTorch, Tensorflow, Keras, scikit-learn