# Fei Sun

Curriculum Vitae

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Google scholar

### EDUCATION

- 2012–2017 Institute of Computing Technology, Chinese Academy of Sciences *Ph.D. in Computer Science* 
  - O Research Advisor: Prof. Jun Xu, Prof. Jiafeng Guo, & Prof. Xueqi Cheng
  - O Thesis: Distributed Text Representations Based on Distributional Hypothesis
- 2009–2012 Beijing Institute of Technology, School of Computer Science M.S. in Computer Science
  - Research Advisor: Prof. Lejian Liao
- 2005–2009 Beijing Institute of Technology, School of Software BEng in Software Engineering
  - Rank: No.9 out of 213 undergraduates in school of software

#### RESEARCH INTEREST

- NLP Text Representation, Text Summarization
  - IR Recommender System, Semantic Matching

#### WORK EXPERIENCE

- 2022- Associate Professor, ICT, CAS, Beijing
  - Automatic algorithm audit.
  - Machine Unlearning.
- 2020–2022 Algorithm Expert, Alibaba Damo Academy, Beijing
  - O Machine unlearning in recommender system.
  - O Conversational recommender system & faithfulness evaluation in text summarization.
  - o privacy mechanism in recommender system.
- 2019–2020 Algorithm Expert, Alibaba Recommendation Team, Beijing
  - Hard negative samples mining and exposed but not clicked samples modeling in candidate generation of recommender system;
  - Improved candidate generation models in recommender system;
  - O Representation learning & user modeling in recommender system.
- 2017–2019 Senior Algorithm Engineer, Alibaba Recommendation Team, Beijing
  - $\odot$  Improved the accuracy of CTR model with transformer architecture;
  - Optimized the displayed pictures of products to improve CTR in recommendation;
  - O Short title generation for products in recommendation channel of Taobao App.

#### SKILLS

Programming Python, PyTorch, TensorFlow, SQL, C/C++

Language Chinese (native), English (fluent)

Others Linux/Unix, LATEX

# AWARDS & HONORS

# 11/2019 RecSys 2019 Best Long Paper Runner-up

# Professional Activities

Senior PC IJCAI 2021, AAAI 2022

Journal Reviewer CSUR, TOIS, TKDE, TIST, JAIR, IPM

PC Member ICML 2022–2023, NeurIPS 2022–2023, EMNLP 2016–2023, ACL 2019–2023, NAACL 2021, EACL 2017, EACL 2021, AAAI 2019–2023, IJCAI 2021–2023, SIGIR 2019–2023, WWW 2019–2023, KDD 2021–2022, WSDM 2021–2023, CIKM 2020–2022, ECIR 2019, COLING 2020

Organizer NLP4Rec: WSDM 2020 workshop

# SELECTED PUBLICATIONS

- Full List https://scholar.google.com/citations?user=01RxBhcAAAAJ
  Recommender System
- TOIS 2023 Ziqian Chen, **Fei Sun**\*, Yifan Tang, Haokun Chen, Jinyang Gao, Bolin Ding. Studying the Impact of Data Disclosure Mechanism in Recommender Systems via Simulation. \*corresponding author.
- CSUR 2022 Shiwen Wu, **Fei Sun**\*, Wentao Zhang, Xu Xie, Bin Cui. Graph Neural Networks in Recommender Systems: A Survey. \***Equally Contributed**.
- WWW 2022 Chong Chen, **Fei Sun**\*, Min Zhang, Bolin Ding. Recommendation Unlearning. \*corresponding author.
- ICDE 2022 Xu Xie, **Fei Sun**, Zhaoyang Liu, Shiwen Wu, Jinyang Gao, Jiandong Zhang, Bolin Ding, Bin Cui. Contrastive Learning for Sequential Recommendation.
- WWW 2021 Shuchang Liu, **Fei Sun**\*, Yingqiang Ge, Changhua Pei and Yongfeng Zhang. Variation Control and Evaluation for Generative Slate Recommendations. \*corresponding author.
- ICDE 2021 Xu Xie, **Fei Sun**\*, Xiaoyong Yang, Zhao Yang, Jinyang Gao, Wenwu Ou and Bin Cui. Explore User Neighborhood for Real-time E-commerce Recommendation. \*corresponding author.
- TOIS 2020 Yuan Zhang, **Fei Sun**\*, Xiaoyong Yang, Chen Xu, Wenwu Ou, and Yan Zhang. Graph-based Regularization on Embedding Layers for Recommendation. \*corresponding author.
- SIGIR 2021 Yang Deng, Yaliang Li, **Fei Sun**, Bolin Ding, Wai Lam. Unified Conversational Recommendation Policy Learning via Graph-based Reinforcement Learning.
- IJCAI 2020 Zhaoyang Liu, Haokun Chen, **Fei Sun**, Xu Xie, Jinyang Gao, Bolin Ding, Yanyan Shen. Intent Preference Decoupling for User Representation on Online Recommender System.
- RecSys 2019 Xiao Lin, Hongjie Chen, Changhua Pei, Fei Sun, Xuanji Xiao, Hanxiao Sun, Yongfeng Zhang, Wenwu Ou and Peng Jiang. A Pareto-Efficient Algorithm for Multiple Objective Optimization in E-Commerce Recommendation. Best Long Paper Runner-up.

- RecSys 2019 Changhua Pei, Yi Zhang, Yongfeng Zhang, Fei Sun, Xiao Lin, Hanxiao Sun, Jian Wu, Peng Jiang, Junfeng Ge and Wenwu Ou. Personalized Re-ranking for E-commerce Recommender Systems.
  - CIKM 2019 Fei Sun, Jun Liu, Jian Wu, Changhua Pei, Xiao Lin, Wenwu Ou and Peng Jiang. BERT4Rec: Sequential Recommendation with Bidirectional Encoder Representations from Transformer.
  - KDD 2019 Wen Chen, Pipei Huang, Jiaming Xu, Xin Guo, Cheng Guo, **Fei Sun**, Chao Li, Andreas Pfadler, Huan Zhao, Binqiang Zhao. POG: Personalized Outfit Generation for Fashion Recommendation at Alibaba iFashion.
  - CIKM 2018 Qiaolin Xia, Peng Jiang, **Fei Sun**, Yi Zhang, Xiaobo Wang, and Zhifang Sui.
    Modeling Consumer Buying Decision for Recommendation Based on Multi-Task
    Deep Learning.

## Summarization & Dialogue

- EMNLP 2021 Yuexiang Xie, **Fei Sun**, Yang Deng, Yaliang Li, Bolin Ding. Factual Consistency Evaluation for Text Summarization via Counterfactual Estimation.
- CIKM 2020 Changying Hao, Liang Pang, Yanyan Lan, **Fei Sun**, Jiafeng Guo and Xueqi Cheng. Ranking Enhanced Dialogue Generation.
- AAAI 2020 Min Yang, Chengming Li, **Fei Sun**, Zhou Zhao, Ying Shen, Chenglin Wu. Be Relevant, Non-redundant, Timely: Deep Reinforcement Learning for Real-time Event Summarization.
- ACL 2019 Hui Su, Xiaoyu Shen, Rongzhi Zhang, **Fei Sun**, Pengwei Hu, Cheng Niu and Jie Zhou. Improving Multi-turn Dialogue Modelling with Utterance ReWriter.
- CIKM 2018 Fei Sun, Peng Jiang, Hanxiao Sun, Changhua Pei, Wenwu Ou, and Xiaobo Wang. Multi-Source Pointer Network for Product Title Summarization.

# Text Representation

- CJC 2019 Fei Sun, Jiafeng Guo, Yanyan Lan, Jun Xu, and Xueqi Cheng. A Survey on Distributed Word Representation.
- IJCAI 2016 Fei Sun, Jiafeng Guo, Yanyan Lan, Jun Xu, and Xueqi Cheng. Sparse Word Embeddings Using  $\ell_1$  Regularized Online Learning.
- AAAI 2016 Fei Sun, Jiafeng Guo, Yanyan Lan, Jun Xu, and Xueqi Cheng. *Inside Out*: Two Jointly Predictive Models for Word Representations and Phrase Representations.
- EMNLP 2015 Yanran Li, Wenjie Li, **Fei Sun**, and Sujian Li. Component-enhanced chinese character embeddings.
  - ACL 2015 Fei Sun, Jiafeng Guo, Yanyan Lan, Jun Xu, and Xueqi Cheng. Learning word representations by jointly modeling syntagmatic and paradigmatic relations.

#### Network Analysis

- PAKDD 2020 Tianshu Lyu, **Fei Sun**, and Yan Zhang. Node Conductance: A Scalable Node Centrality Measure on Big Networks.
- RecSys 2019 Tianshu Lyu, Fei Sun\*, Peng Jiang, Wenwu Ou and Yan Zhang. Compositional Network Embedding for Link Prediction. \*corresponding author.
- IJCAI 2019 Yun Wang, Lun Du, Guojie Song, Xiaojun Ma, Lichen Jin, Wei Lin, and Fei Sun. Tag2Gauss: Learning Tag Representations via Gaussian Distribution in Tagged Networks.

#### Information Extraction

- KAIS 2015 Dandan Song, **Fei Sun**, and Lejian Liao. A hybrid approach for content extraction with text density and visual importance of dom nodes. 2015
- SIGIR 2011 Fei Sun, Dandan Song, and Lejian Liao. Dom based content extraction via text density.