WUJIANG XU

Fields: Data Mining, Computer Vision
(+86)18281516701 ⋄ swust_imp@163.com

EDUCATION

Xi'an Jiaotong University *2019 - 2022*
Master in Software Engineering
Xi'An, Shaanxi, China

Southwest University of Science and Technology *2015 - 2019*
Bachelor of Electronic Engineering
Mianyang, Sichuan, China

PUBLICATIONS

Google Scholar

Conference and Journal Publications

Yifei Xu, **Wujiang Xu**, Mian Wang et al. Saliency aware image cropping with latent region pair. Expert Systems with Applications (**ESWA**), 2021. PDF

Wujiang Xu, Yifei Xu et al. Recursive Multi-Relational Graph Convolutional Network for Automatic Photo Selection. IEEE Transactions on Multimedia (**TMM**), 2022. PDF

Wujiang Xu*, Shaoshuai Li* et al. Neural Node Matching for Multi-Target Cross Domain Recommendation. The 39th IEEE International Conference on Data Engineering (**ICDE 2023**). PDF Code

Wujiang Xu, Runzhong Wang et al. MHSCNet: A Multimodal Hierarchical Shot-aware Convolutional Network for Video Summarization. 2023 IEEE International Conference on Acoustics, Speech, and Signal Processing (**ICASSP2023**). PDF Code

Preprints and Submissions

Wujiang Xu, Qitian Wu, Runzhong Wang et al. Rethinking Cross-Domain Sequential Recommendation under Open-World Assumptions. (In Submission of **WWW2024**.) (Received 5 ratings all higher than weak accept in the first stage.) PDF

Wujiang Xu, Xuying Ning et al. Towards Open-world Cross-Domain Sequential Recommendation: A Model-Agnostic Contrastive Denoising Approach. (In Submission of **ICDE2024**.) PDF

WORK EXPERIENCE

Alibaba (Ant) Group – MYbank Data Intelligence
Machine Learning Engineer(Full-time) 2022.07 - present
Machine Learning Engineer(Internship) 2021.04 - 2021.12

Multi-domain message recommendation model - completed the offline data processing part using **SQL**, constructed the multi-domain message recommendation model using **Tensorflow**, and completed the online algorithm deployment using **JAVA**. In the online experiment, the algorithm affected about 10 million people every day, and achieved an incremental visiting rate(**CTR**) of about **5%** and an incremental conversion rate(**CVR**) of about **2%** with PyTorch.

Multi-channel bundle recommendation model combining with optimization model - This framework consists of two stages. The first stage model is the CVR prediction model to score the user predicted conversion score; The second stage is the operation model, which will make the optimal allocation according to the scores of the first stage model and the given budget. I completed the

training data preparation with **SQL** for channel combination statistics features, and completed the development using **TensorFlow** of the first stage scoring model. The optimization algorithm of the second stage uses dual gradient descent to learn the constraint coefficients. As a result, compared with the control group, the treatment group decreased single customer support cost by **6.9%**, and decreased the incremental single customer cost by **60%**, earned over **10 million** profits.

ByteDance – Lark
Machine Learning Engineer(Internship) 2020.11 - 2021.03
Video conference HDR approach - developed the 3d lut deep learning model for HDR with **Pytorch** and post-processed algorithm using **C++**. Besides, designed a sliding window smoothing parameters method to solve the problem of picture jitter. As a result, sped up the post-processing algorithm from 40ms to **2ms** and HDR algorithm was submitted to the product testing.

Tencent – Tencent Music
Machine Learning Engineer(Internship) 2020.07 - 2020.10
QQ Music Multimedia Content Quality Evaluation - developed a DL model in **Pytorch** with multi-modal features using video, including visual features and audio features. User consumption situation was used as the label for classification while video features were extracted and used in the QQ Music video recommendation item side. As a result, the medium-high classification accuracy reached 95% and the recommendation offline AUC was improved by **1%**.

HONORS AND AWARDS

Ranked Top 5% in the department of software, Xi'an Jiaotong University (14/291)	2020.09-2021.06
First Prize Academic Scholarship, Xi'an Jiaotong University	2021.09
Esmond Society Scholarship, Xi'an Jiaotong University	2021.09
Outstanding Graduate, Xi'an Jiaotong University (Top5%)	2020.09-2022.06
Science and Technology Innovation Scholarship, Art Specialty Scholarship	2018.09
Second Prize of "SIEMENS Cup" China Intelligent Manufacturing Challenge	2018.08
Second Prize of The National Undergraduate Electronic Design Contest	2017.07

PERSONAL TRAITS

Highly motivated and eager to focus on learning meaningful work.

Strong adaptability to new environments.

Work and communicate harmoniously with colleagues.

SKILLS

PyTorch

TensorFlow

C++

Python

SQL