# Changshuo Zhang

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#### **EDUCATION**

Renmin University of China (GPA: 3.43/4.0)

Artificial Intelligence 2023.09-2026.07

University of Eletronic and Technology of China (GPA: 3.89/4.0)

Computer Science and Technology

2019.09-2023.07

#### **PUBLICATIONS**

• Sirui Chen\*, Yuan Wang\*, Zijing Wen, Zhiyu Li, Changshuo Zhang, Xiao Zhang, Quan Lin, Cheng Zhu, Jun Xu. Controllable Multi-Objective Re-ranking with Policy Hypernetworks. ACM SIGKDD 2023

Changshuo Zhang\*, Sirui Chen\*, Xiao Zhang, Sunhao Dai, Weijie Yu, Jun Xu. Reinforcing Long-Term Performance in Recommender Systems with User-Oriented Exploration Policy. ACM SIGIR 2024

#### RESEARCH

#### Controllable Multi-Objective Re-ranking with Policy Hypernetworks

Supervised by Prof. Jun Xu and Assistant Prof. Xiao Zhang

08/2022 - 12/2022

- Introduced an innovative problem addressing real-time preference adjustments for multi-objective modeling, and developed a cutting-edge solution employing hypernetworks: the adaptable multi-objective re-ranking framework.
- Devised a novel re-ranking model based on the Actor-Evaluator framework, effectively integrating all four primary types of business-oriented tasks, and assessed on online A/B testing manner.
- Source code: https://github.com/lyingCS/Controllable-Multi-Objective-Reranking.

Reinforcing Long-Term Performance in Recommender Systems with User-Oriented Exploration Policy Supervised by Assistant Prof. Xiao Zhang and Prof. Jun Xu 09/2023 - 01/2024

- Introduced User-Oriented Exploration Policy (UOEP), a novel approach that enables fine-grained exploration among user groups to solve the challenge of difficult exploration of reinforcement learning strategies due to different user behavior patterns.
- Experiments on public datasets demonstrate the effectiveness of UOEP in terms of long-term benefits of the recommendation system and also verify the improvement for low-activity users and increased fairness among users.
- Source code: https://github.com/lyingCS/UOEP.

### HONORS & AWARDS

- National Scholarship (2021-2022)
- Blue Bridge Cup Competition

National First Prize

• China Undergraduate Mathematical Contest in Modeling

National Second Prize

• American Undergraduate Mathematical Contest in Modeling

Meritorious Winner

• CCF Certified Software Professional

350 points

• China Collegiate Algorithm Design & Programming Challenge Contest Silver Medal

## **SKILLS**

- programming language: C, C++, Matlab, Python, Java, SQL.
- algorithm: LeetCode website TOP 2.67%, problem solving 750+, CSP certification 350 points (TOP 1.93%).
- other skills: Git, Vim, Latex, Linux, Qt, etc.



Master

Bachelor