# Zhuohao Yu

🗠 zyu@stu.pku.edu.cn • 🌐 zhuohaoyu.github.io • 🞓 Google Scholar

#### Education

Jun, 2026Peking University, National Engineering Research Center for Software EngineeringBeijing, China(Expected)Master of Engineering in Software EngineeringAdvisors: Prof. Wei Ye and Prof. Shikun ZhangBeijing, ChinaGPA: 3.88/4.00Citations: 350+H-index: 7 (Mar, 2025)Beijing, ChinaJun, 2023Renmin University of China, School of InformationBeijing, ChinaBachelor of Engineering in Computer ScienceGPA: 3.75/4.00Beijing, China

#### Selected Awards

- 2021 **Gold Medal**, International Collegiate Programming Contest (ICPC) Asia Regional Contest
- 2019 Silver Medal, International Collegiate Programming Contest (ICPC) Asia Regional Contest
- 2018 Silver Medal, The 35th China National Olympiad in Informatics (NOI)

#### **Selected Publications**

**Research Vision**: Advancing *interpretable, reliable, self-evolving* LLMs through *autonomous evaluation, alignment* and *reasoning*, with a commitment to creating *trustworthy, practical, open-source* AI systems.

- SAEMARK: Steering Personalized Multilingual LLM Watermarks with Sparse Autoencoders Zhuohao Yu, Xingru Jiang, Weizheng Gu, Chang Gao, Yidong Wang, Shikun Zhang, Wei Ye Preprint, In Review for ACL 2025
   Reasoning Through Execution: Unifying Process and Outcome Rewards for Code Generation
- Zhuohao Yu, Weizheng Gu, Yidong Wang, Zhengran Zeng, Jindong Wang, Wei Ye, Shikun Zhang

   Preprint, In Review for ICML 2025
- [3] PANDALM: An Automatic Evaluation Benchmark for LLM Instruction Tuning Optimization Yidong Wang\*, Zhuohao Yu\* (\*Equal Contribution), Zhengran Zeng, Linyi Yang, Cunxiang Wang, Hao Chen, Chaoya Jiang, Rui Xie, Jindong Wang, Xing Xie, Wei Ye, Shikun Zhang, Yue Zhang International Conference on Learning Representations (ICLR 2024) [200+ Citations, 900+ Stars] CODE
- [4] KIEval: A Knowledge-grounded Interactive Evaluation Framework for Large Language Models Zhuohao Yu, Chang Gao, Wenjin Yao, Yidong Wang, Wei Ye, Jindong Wang, Xing Xie, Yue Zhang, Shikun Zhang
- Annual Meeting of the Association for Computational Linguistics (ACL 2024) [Main Conference] CODE
   [5] FREEEval: A Modular Framework for Trustworthy and Efficient Evaluation of Large Language Models
   Zhuohao Yu, Chang Gao, Wenjin Yao, Yidong Wang, Zhengran Zeng, Wei Ye, Jindong Wang, Yue Zhang, Shikun Zhang

Empirical Methods in Natural Language Processing (EMNLP 2024) [Demo Track] 🖓 CODE

[6] Exploring Vision-Language Models for Imbalanced Learning Yidong Wang, Zhuohao Yu, Jindong Wang, Qiang Heng, Hao Chen, Wei Ye, Rui Xie, Xing Xie, Shikun Zhang International Journal of Computer Vision (IJCV 2023)

#### **Selected Projects**

- Try PAPERLENS: https://paperlens.aiyu.fun 2025 **PAPERLENS** – Solo Project • An LLM-powered research platform for brainstorming ideas, exploring latest works and organizing papers • Enables vague idea searches with recommendations of the latest relevant works in CS / AI fields • New paradigm: Interactive Searching, where LLM learns user interests through iterative interactions · Continues to evolve with ongoing development 2023 **CODESHELL** – Core Developer TECHNICAL REPORT CODE • Built a 7B parameter code LLM achieving SOTA performance among similar-sized models at release
  - Led infrastructure development: designed and managed large-scale GPU clusters for efficient training
  - Responsible for model architecture design and data curation on 500B+ tokens
  - Project gained significant impact with 1.6k+ GitHub stars within 3 months
- 2021 **TEXTBOX** – Contributor
  - A text generation toolkit containing NLG algorithms, models and datasets before the LLM era
  - Project gained 1.1k+ stars and was featured in ACL 2021 System Demonstration Track
  - Implemented key features for NLG model training and evaluation

### **Industry Experience**

Sep, 2021 **ByteDance** – Machine Learning Algorithm Engineer Intern Mentored by: Yilun Sun, Jiao Ran

- Jun, 2023 Led end-to-end development of large-scale Chinese Character Correction Pipeline for Douyin (TikTok)
  - Designed two-stage microservice architecture separating detection and correction networks
  - Handling 100M+ daily requests (40K QPS at peak) with continual pre-trained models and efficient design
  - Full ownership from data preparation, model training, implementation to production deployment

### **Academic Service**

#### **Teaching Assistant:**

- Programming I (UG), Fall 2022, Renmin University of China
- Programming II (UG), Spring 2021, Renmin University of China
- Algorithmic Design (UG), Summer 2022, Renmin University of China

#### **Conference Reviewer:**

- \*ACL: ACL (2024, 2025), NAACL (2024, 2025), EMNLP (2024), EACL (2024)
- ML/AI: ICLR (2025), ICML (2025), AISTATS (2025)

#### Journal Reviewer:

ACM Transactions on Intelligent Systems and Technology (TIST)

## Skills

#### **Research Expertise:**

- Technical: AI/ML development at scale, distributed systems, full-stack implementation of research ideas
- Leadership: Project management, team collaboration, independent research capability
- Communication: Academic writing, technical presentations, open-source contributions

#### Core Strengths:

- Self-motivated researcher with proven track record in both academic and industrial settings
- Strong ability to lead complex projects while maintaining efficient collaboration and communication
- Extensive experience in production-level research systems and infrastructure management

Instructor: Prof. Dr. Hui Sun Instructor: Prof. Dr. Gang Yang Instructor: Prof. Dr. Gang Yang

#### PAPER CODE