李展利

(+86)156-2350-1965 · lizhanli@stu.zuel.edu.cn · zhanli-li.github.io · Zhanli-Li (160 stars+)

教育背景

中南财经政法大学　文澜学院 (荣誉学院)　数字经济　2023.9 - 2027.6

加权平均分: 93.73/100　**专业排名:** 2/80　**奖学金: 2025 年国家奖学金**

研究兴趣: LLM　Agentic Training　Deep Learning　Causal Inference

学术论文

Zhanli Li, Huiwen Tian, Lvzhou Luo, Yixuan Cao, Ping Luo. *DeepRead: Document Structure-Aware Reasoning to Enhance Agentic Search. KDD 2026* (CCF-A), **Under Review　[First Author]**

Zhanli Li, Yixuan Cao, Lvzhou Luo, Ping Luo. *Navigating Large-Scale Document Collections: MuDABench for Multi-Document Analytical QA. ACL 2026 Findings* (CCF-A)　**[First Author]**

Zhanli Li, Zichao Yang. *ESG Rating Disagreement and Corporate Total Factor Productivity: Inference and Prediction. Finance Research Letters*, vol. 78, p. 107127, 2025. (中科院 Q1 Top，JCR Q1，IF: 6.9)　**[First Author]**

科研经历

面向真实数据分析的 Agentic 训练‡　项目负责人　2026.3 - 至今

现有数据分析 benchmark 多依赖**固定标准答案**进行评测，难以覆盖开放场景下 data agent 产生的**非标准但高价值 insight**，从而系统性低估其真实能力。为此，我们构建了**大规模交互式数据湖环境**，支持 agent 在真实数据分布中自主探索；并基于该环境，在 **24 张 A100** 上训练 **Qwen3.5-9B** 作为 **verifier agent**，对 data agent 生成的每条 insight 进行**细粒度的正确性与价值验证**。进一步地，我们将训练后的 verifier 融入**迭代式 agent harness**，形成 "**生成-验证-反馈**" 闭环，在真实业务场景中产出了许多**高价值 insight**。

▷ 入选**中关村学院深澜计划**，预计投稿 *ICLR 2026*

DeepRead：文档结构感知的 Agentic Search†　项目负责人　2025.10 - 2025.2

现有 Agentic Search 往往将长文档视为扁平 chunk 集合，忽略文档原生的**层级结构**与**顺序逻辑**。我们提出 **DeepRead**：一种结构感知的文档推理 Agent，利用 OCR 保持版面结构保真，构建**段落级坐标**，并为 LLM 设计两类协同工具：**Retrieve** 与 **ReadSection**，使得大模型涌现 "locate-then-read" 推理范式，显著缓解传统检索的上下文碎片化问题。在四个覆盖多类型文档的基准上，DeepRead 相比 **Search-o1** 风格 Agentic Search 基线平均提升 **10.3%**。

▷ **提交至** *KDD 2026 (CCF-A)*, 论文推文于小红书获得 130 余次收藏，预印本被知名媒体**新智元**报道

MuDABench：多文档分析问答基准与多 Agent 框架†　项目负责人　2025.4 - 2025.12

大规模文档集合蕴含丰富知识，但在**上千份**长文档中实现可扩展的**多文档分析问答**仍具挑战。本项目基于**远程监督**与专家校验，构建了当前**规模最大的**多文档分析问答基准之一（**80k+ 页**文档、**332** 道分析型问题、**4,964** 结构化中间事实），用于系统评测多文档检索、跨文档聚合与数值推理能力。实验显示，标准检索服务在该设置下表现有限：以 OpenAI **File Search** 为代表的基线最终准确率最高为 **13.68**；我们提出的 **Multi-Agent** 将其提升至 **26.51**。进一步误差分析表明，主要瓶颈在于**单文档信息抽取**的稳定性与高精度定位。

▷ **发表于** *ACL 2026 Findings (CCF-A)*

基于 SHAP 的公司金融因果推断框架*　项目负责人　2024.9 - 2025.1

针对传统面板数据模型依赖线性假设、难以刻画复杂非线性动态的问题，我们考虑了编码面板数据来提升模型的拟合能力，同时保持**统计因果推断**上的解释性。我们构建了可解释建模框架并集成 **Optuna** 自动超参搜索，在 TFP 预测任务上取得 $R^2 = 0.76$，有效超越传统线性基线；进一步使用 **SHapley Additive exPlanations (SHAP)** 对面板数据中的机制进行可追溯分析，量化并分解 ESG 评级分歧对结果变量的**非线性边际贡献**，从而揭示潜在因果路径。

▷ **发表于** *Finance Research Letters*（中科院 Q1 Top，JCR Q1，IF: 6.9），**清华大学因果推断研讨会优秀论文（Top 3%）**

† 代表在中国科学院计算技术研究所智能信息处理重点实验室 曹逸轩 、罗平副教授指导下进行

‡ 代表在北京大学 & 中关村学院 张文涛 助理教授指导下进行　* 在中南财经政法大学文澜学院 杨子超 助理教授指导下进行

实习经历

北京庖丁科技有限公司研究组　*AI 技术研究实习生*　2025.6 - 2026.2

导师: 罗平　曹逸轩　**项目:** 上下文检索在实际生产环境中的改进

依托公司先进自研闭源**文档解析**模型 PDFlux并将结果嵌入商业级 RAG 系统 ChatDOC，重点优化使用 Reranker 精排时面临的**上下文缺失**的痛点，目前ChatDOC已经在多家**顶级金融机构**生产环境部署，显著提升了业务效率。

技能与服务

编程语言: Python, C/C++, LaTeX, Markdown　**工具:** Docker, SSH, tmux, Ubuntu　**英语:** CET-4：522　CET-6: 508

框架: ms-swift, vllm, verl, llamaindex, transformers, torch, sklearn, pandas, numpy　**审稿:** *Finance Research Letters*

ZHANLI LI (李展利)

(+86) 156-2350-1965 ◇ lizhanli@stu.zuel.edu.cn ◇ zhanli-li.github.io ◇ Zhanli-Li (160+ stars)

EDUCATION

Zhongnan University of Economics and Law *September 2023 – June 2027*
Wenlan School of Business (Honors College), B.Sc. in Digital Economy
Weighted Avg: 93.73/100 Rank: 2/80 2025 National Scholarship
Research Interests: LLMs, Agentic Training, Deep Learning, Causal Inference

PUBLICATIONS

Zhanli Li, Huiwen Tian, Lvzhou Luo, Yixuan Cao, Ping Luo. *DeepRead: Document Structure-Aware Reasoning to Enhance Agentic Search. KDD 2026* (CCF-A), **Under Review**. [**First Author**]

Zhanli Li, Yixuan Cao, Lvzhou Luo, Ping Luo. *Navigating Large-Scale Document Collections: MuDABench for Multi-Document Analytical QA. ACL 2026 Findings* (CCF-A). [**First Author**]

Zhanli Li, Zichao Yang. *ESG Rating Disagreement and Corporate Total Factor Productivity: Inference and Prediction. Finance Research Letters*, vol. 78, p. 107127, 2025. (CAS Q1 Top, JCR Q1, IF: 6.9). [**First Author**]

RESEARCH EXPERIENCE

Agentic Training for Real-World Data Analysis‡ *March 2026 – Present*
Role: Project Leader
Existing evaluation benchmarks for data analysis agents typically rely on **fixed reference answers**, making it difficult to capture **non-canonical yet valuable insights** generated in open-ended analytical settings, thereby systematically underestimating their true capability. To address this, we construct a **large-scale interactive data lake environment** that supports autonomous exploration under realistic data distributions. Built on this environment, we train **Qwen3.5-9B** as a **verifier agent** on **24 A100 GPUs** to perform **fine-grained verification** of each insight produced by the data agent, assessing both correctness and analytical value. We further integrate the trained verifier into an **iterative agent harness**, forming a "**generate-verify-feedback**" loop that continuously yields **high-value insights** in real-world scenarios.
▷ Selected for the **Zhongguancun Academy Shenlan Program**; intended submission to *ICLR 2026*.

DeepRead: Document Structure-Aware Reasoning to Enhance Agentic Search† *October 2025 – February 2026*
Role: Project Leader
Existing agentic search frameworks often treat long documents as flat chunk collections, ignoring native **hierarchical structures** and **sequential logic**. We propose **DeepRead**, a structure-aware document reasoning agent that preserves layout fidelity via OCR, constructs **paragraph-level coordinates**, and equips the LLM with two synergistic tools: **Retrieve** and **ReadSection**. This induces an emergent "locate-then-read" reasoning paradigm, significantly mitigating context fragmentation issues inherent in conventional retrieval. Across four benchmarks covering diverse document types, DeepRead outperforms **Search-o1** style agentic search baselines by an average of **10.3%**.
▷ **Submitted to** *KDD 2026 (CCF-A)*. The preprint was reported by the prominent tech media **New Wisdom (新智元)** and received over 130 saves on Xiaohongshu.

MuDABench: Multi-Document Analytical QA Benchmark and Multi-Agent Framework† *April 2025 – December 2025*
Role: Project Leader
Large-scale document collections contain rich knowledge, yet scalable multi-document analytical QA across **thousands** of long documents remains challenging. We constructed one of the **largest** multi-document analytical QA benchmarks to date (**80k+** pages, **332** analytical questions, **4,964** structured intermediate

facts) using **distant supervision** and expert verification, enabling systematic evaluation of multi-document retrieval, cross-document aggregation, and numerical reasoning. Experiments reveal that standard retrieval services struggle in this setting: OpenAI's **File Search** achieves a best accuracy of only **13.68%**. Our proposed **Multi-Agent** workflow raises this to **26.51%**. Further error analysis indicates that the primary bottleneck lies in the stability and high-precision localization of **single-document information extraction**.
▷ **Published in** *ACL 2026 Findings (CCF-A).*

Causal Inference Framework via SHapley Additive exPlanations in Corporate Finance[*] *September 2024 – January 2025*
Role: Project Leader
Traditional panel data models rely heavily on linear assumptions and struggle to capture complex nonlinear dynamics. We address this by encoding panel structure to enhance model fitting capacity while preserving **causal interpretability**. We developed an interpretable modeling framework integrated with **Optuna** for automatic hyperparameter tuning, achieving an R^2 of 0.76 in TFP prediction, substantially outperforming linear baselines. We further employed **SHapley Additive exPlanations (SHAP)** to trace mechanisms within the panel data, quantifying and decomposing the **nonlinear marginal contributions** of ESG rating disagreement, thereby uncovering latent causal pathways.
▷ **Published in** *Finance Research Letters* (CAS Q1 Top, JCR Q1, IF: 6.9). Selected as **Outstanding Paper at the Tsinghua University Causal Inference Seminar (Top 3%)**.

[†] *Conducted under the supervision of Associate Professors Yixuan Cao and Ping Luo, Key Laboratory of Intelligent Information Processing, Institute of Computing Technology, Chinese Academy of Sciences*

[‡] *Conducted under the supervision of Assistant Professor Wentao Zhang, Peking University & Zhongguancun Academy*

[*] *Conducted under the supervision of Assistant Professor Zichao Yang, Wenlan School of Business, Zhongnan University of Economics and Law*

INTERNSHIP EXPERIENCE

Beijing Paoding Technology Co., Ltd. — Research Dept. *June 2025 – February 2026*
Role: AI Research Intern **Mentors:** Ping Luo, Yixuan Cao
Project: Improving Context Retrieval in Production-Grade RAG Systems

Leveraged the company's proprietary **document parsing** model PDFlux and integrated its outputs into the commercial RAG product ChatDOC, focusing on mitigating **context-missing** issues introduced by reranker-based retrieval and improving retrieval completeness and ranking quality in complex document scenarios. The system has been deployed in production environments at several **top-tier financial institutions**, markedly enhancing operational efficiency.

SELECTED AWARDS

China National Scholarship *November 2025*
Highest academic honor for undergraduates in China (Top 0.2%).

China Undergraduate Mathematical Contest in Modeling *November 2025*
First Prize (Team Leader, Top 3%).

Hunan Province Outstanding Student (High School) *April 2023*
Awarded to the top 0.1% of high school students in Hunan Province.

TECHNICAL SKILLS & SERVICE

Languages: Chinese (native), English (CET-4: 522, CET-6: 508)
Programming Languages: Python, C/C++, LaTeX, Markdown
Tools: Docker, SSH, tmux, Ubuntu
Libraries & Frameworks: ms-swift, vllm, verl, llamaindex, transformers, torch, sklearn, pandas, numpy
Academic Service: Independent Reviewer for *Finance Research Letters*