廖桓萱

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☎ 教育背景

中国科学院大学自动化研究所, 北京

2023 - 至今

在读博士 模式识别, 自动化研究所模式识别国家重点实验室, 导师何世柱 and 刘康

华北电力大学, 北京

2019 - 2023

学士智能科学与技术(创新),1/13

📽 实习/项目经历

字节跳动北京

2025年6月-至今

实习 研究型实习生 (高效多模态模型和长视频理解)

蚂蚁集团北京

2025年2月-2025年6月

实习 研究型实习生 (长上下文)

基于全局和局部的长上下文压缩

- 实现了基于 Qformer 和 MLP 的动态路由 soft token 全局压缩和基于分类的 hard token 局部压缩 长上下文建模综述
 - 基于自己的长上下文建模仓库完成综述撰写

KV Cache Channel 压缩

• 对 token 进行动态 channel 裁剪 (topk 和 topp) 而不是只针对长度压缩, 同时考虑恢复裁剪的 channel

♀研究兴趣

- 长上下文建模:
 - 综述: Awesome-LLM-Long-Context-Modeling (GitHub Star > 1.7K)
 - 文本压缩: HyCo2 (ArXiv 2025)
 - KV 压缩: QuarK (ArXiv 2025)
- 高效推理和知识激活:
 - 指令学习: TAGI (NeurIPS 2024)
 - 知识唤醒: AAG (COLING 2025)
 - 知识内化: SKIntern (COLING 2025)
 - 知识协同: NesyCD (AAAI 2025)
 - 知识迁移: DATA (Arxiv 2025)
- 高效多模态模型及推理

■ 主要文章

(* stands for equal contribution; Listed in reverse chronological order.)

- [15] <u>Huanxuan Liao</u>, Yixing Xu, Shizhu He, Guanchen Li, Xuanwu Yin, Dong Li, Emad Barsoum, Jun Zhao, Kang Liu. QuarK: Query-Aware Unstructured Sparsity with Recoverable KV Cache Channel Pruning. (Preprint, 2025, 在投)
- [14] <u>Huanxuan Liao</u>, Shizhu He, Yao Xu, Jun Zhao, Kang Liu. Beyond Hard and Soft: Hybrid Context Compression for Balancing Local and Global Information Retention. (Preprint, 2025, 在投)
- [13] <u>Huanxuan Liao</u>, Shizhu He, Yupu Hao, Jun Zhao, Kang Liu. DATA: Decomposed Attention-based Task Adaptation for Rehearsal-Free Continual Learning. (Preprint, 2025, 在投)

- [12] <u>Huanxuan Liao</u>, Shizhu He, Yupu Hao, Xiang Li, Yuanzhe Zhang, Kang Liu, Jun Zhao. SKIntern: Internalizing Symbolic Knowledge for Distilling Better CoT Capabilities into Small Language Models. (COLING 2025, CCF-B)
- [11] Jiaheng Liu, Dawei Zhu, Zhiqi Bai, Yancheng He, <u>Huanxuan Liao</u>, Haoran Que, Zekun Wang, Chenchen Zhang, Ge Zhang, Jiebin Zhang, Yuanxing Zhang, Zhuo Chen, Hangyu Guo, Shilong Li, Ziqiang Liu, Yong Shan, Yifan Song, Jiayi Tian, Wenhao Wu, Zhejian Zhou, Ruijie Zhu, Junlan Feng, Yang Gao, Shizhu He, Zhoujun Li, Tianyu Liu, Fanyu Meng, Wenbo Su, Yingshui Tan, Zili Wang, Jian Yang, Wei Ye, Bo Zheng, Wangchunshu Zhou, Wenhao Huang, Sujian Li, Zhaoxiang Zhang. A Comprehensive Survey on Long Context Language Modeling. (Preprint, 2025)
- [10] <u>Huanxuan Liao</u>, Shizhu He, Yao Xu, Yuanzhe Zhang, Yanchao Hao, Shengping Liu, Kang Liu, Jun Zhao. From Instance Training to Instruction Learning: Task Adapters Generation from Instructions. (NeurIPS 2024, CCF-A)
- [9] <u>Huanxuan Liao</u>, Shizhu He, Yao Xu, Yuanzhe Zhang, Kang Liu, Jun Zhao. Neural-Symbolic Collaborative Distillation: Advancing Small Language Models for Complex Reasoning Tasks. (AAAI 2025, CCF-A)
- [8] <u>Huanxuan Liao</u>, Shizhu He, Yao Xu, Yuanzhe Zhang, Kang Liu, Shengping Liu, Jun Zhao. Awakening Augmented Generation: Learning to Awaken Internal Knowledge of Large Language Models for Question Answering. (COLING 2025, CCF-B)
- [7] Yuqiao Tan, Shizhu He, <u>Huanxuan Liao</u>, Jun Zhao, Kang Liu. Better wit than wealth: Dynamic Parametric Retrieval Augmented Generation for Test-time Knowledge Enhancement. (Preprint, 2025)
- [6] Wangtao Sun, Haotian Xu, <u>Huanxuan Liao</u>, Xuanqing Yu, Zhongtao Jiang, Shizhu He, Jun Zhao, Kang Liu. VaiBot: Shuttle Between the Instructions and Parameters of Large Language Models. (Preprint, 2025)
- [5] Xiangnnan Wu, Shizhu He, <u>Huanxuan Liao</u>, Jun Zhao, Kang Liu. Differentiated Instruction for Student Language Models: Contrastive Error Self-Correction via Refinement Feedback of Large Language Models. (Preprint, 2025)
- [4] Yupu Hao, Pengfei Cao, Zhuoran Jin, <u>Huanxuan Liao</u>, Yubo Chen, Kang Liu, Jun Zhao. Evaluating Personalized Tool-Augmented LLMs from the Perspectives of Personalization and Proactivity. (Preprint, 2025)
- [3] Yupu Hao, Pengfei Cao, Zhuoran Jin, <u>Huanxuan Liao</u>, Yubo Chen, Kang Liu, Jun Zhao. CITI: Enhancing Tool Utilizing Ability in Large Language Models without Sacrificing General Performance. (AAAI 2025, CCF-A)
- [2] Yixuan Weng, Zhiqi Wang, Huanxuan Liao, Shizhu He, Shengping Liu, Kang Liu, Jun Zhao. LMTuner: An user-friendly and highly-integrable Training Framework for fine-tuning Large Language Models. (Preprint, 2023)
- [1] <u>Huanxuan Liao</u>, Shizhu He, Yao Xu, Kang Liu, Jun Zhao. Dynamic Weighted Neural Bellman-Ford Network for Knowledge Graph Reasoning. (CCKS 2023, Springer)

♡ 获奖情况

奖学金 攀登二等奖学金 2024年12月 北京优秀毕业生 2023年6月 国家奖学金 2022年12月 国家奖学金 2021年12月 四方社会奖学金 2020年12月 竞赛 国家三等奖,信息安全竞赛 2022年8月 国家级优秀,全国大学生创新创业项目 2021年12月 北京市三等奖, 互联网+ 2021年8月

፟ ⇔ 专业服务

会议审稿: ACL ARR 2024, 2025. NeurIPS 2025.

开源社区: Awesome-LLM-Long-Context-Modeling 1.7k+ Stars.