YIZHE XIONG (熊翊哲)

🖬 xiongyizhe2001@163.com · 📕 Google Scholar · in linkedin.com/in/bostoncake · 🏶 xiongyizhe.xyz

EDUCATION

Tsinghua University, Beijing, China

Ph.D. in Software Engineering, GPA 3.9/4.0 Research focus: Transfer Learning, Pretraining and Fine-Tuning Foundation Models

Tsinghua University, Beijing, China

B.S. in Computer Science and Technology, GPA 3.7/4.0

🖋 Skills

- Programming Language: C, C++, Python
- Deep learning development: PyTorch, torchvision, Huggingface transformers, timm, MMCV, etc.

EXPERIENCE

Kuaishou Technology

Machine Learning Intern @ Department of Foundation Models and Multimedia

Researching in Large Language Models (LLMs) and Multimodal Large Language Models (MLLMs), focusing on pretraining, fine-tuning, and enhancing model capabilities.

- Investigated the learning dynamics of LLMs and submitted a first-author conference paper: Temporal Scaling Law for Large Language Models, currently under review.
- Contributed to the development of the tokenizer and Mixture-of-Experts (MoE) feature in the KuaiYii model, leading to the submission of Scaffold-BPE and MaskMoE.
- Developed the hyperparameter selection method for the KwaiYii model using Temporal Scaling Law for Large Language Models.
- Developed the fine-tuning process to enable long-context support for the KwaiYii model.

Microsoft (China) Co. Ltd

Software Engineering Intern @ Cloud and AI (C+AI), Microsoft Azure

Enhanced Synapse and developer tooling in Azure Powershell.

- Developed and maintained key features for managing Synapse workspaces.
- Streamlined the PowerShell development process by optimizing the integration pipeline for the AutoRest tool.

PUBLICATIONS

PYRA: Parallel Yielding Re-Activation for Training-Inference Efficient Task Adaptation

European Conference on Computer Vision (ECCV) 2024

Authors: **Yizhe Xiong**, Hui Chen, Tianxiang Hao, Zijia Lin, Jungong Han, Yuesong Zhang, Guoxin Wang, Yongjun Bao, Guiguang Ding

Confidence-based Visual Dispersal for Few-shot Unsupervised Domain Adaptation

International Conference on Computer Vision (ICCV) 2023

Authors: Yizhe Xiong, Hui Chen, Zijia Lin, Sicheng Zhao, Guiguang Ding

ltimedia

October 2023 – Present

May 2021 – August 2021

2018 - 2022

2022 – Present (expected June 2027)

Breaking the Stage Barrier: A Novel Single-Stage Approach to Long Context Extension for Large Language Models

International Conference on Computational Linguistics (COLING) 2025

Authors: Haoran Lian^{*}, Junmin Chen^{*}, Wei Huang^{*}, **Yizhe Xiong**^{*}, Wenping Hu, Guiguang Ding, Hui Chen, Jianwei Niu, Zijia Lin, Fuzheng Zhang, Di Zhang (* denotes equal contribution)

Scaffold-BPE: Enhancing Byte Pair Encoding for Large Language Models with Simple and Effective Scaffold Token Removal

AAAI Conference on Artificial Intelligence (AAAI) 2025

Authors: Haoran Lian, **Yizhe Xiong**, Jianwei Niu, Shasha Mo, Zhenpeng Su, Zijia Lin, Peng Liu, Hui Chen, Guiguang Ding

★ Awards

Academic Scholarship, School of Software, Tsinghua University	December 2024
First Place and Gold Prize, VISION'24 Data Challange, ECCV 2024	eptember 2024
Academic Scholarship, School of Software, Tsinghua University	October 2023
Outstanding Graduate, Department of Computer Science and Technology, Tsinghua University	June 2022

i Additional Information

- GitHub: https://github.com/bostoncake
- Fluent in English (TOEFL 113)