

Kaichao You

Homepage: <https://youkaichao.github.io/>

Education

- 09/2016 – 07/2020, Tsinghua University, Software Engineering, Bachelor of Engineering
 - Graduate with honor: **Tsinghua Top Grade Scholarship** (the highest honor for Tsinghua undergraduates)
- 07/2019 - 09/2019, University of California, Berkeley, Visiting Student Researcher at [RISELab](#)
 - Hosted by [Michael I. Jordan](#)
- 08/2020 – 07/2025(expected), Tsinghua University, Software Engineering, PhD student
 - Deep learning algorithms and systems
- 03/2024 - 12/2024(expected), University of California, Berkeley, Visiting PhD Researcher at [sky_lab](#)
 - Hosted by [Ion Stoica](#)
 - Working on the [vLLM](#) project

Selected Awards

- **Tsinghua Top Grade Scholarship (Undergraduates)**, Tsinghua University (2019)
 - the best honor for undergraduates in Tsinghua
- Outstanding Undergraduate in School of Software, Tsinghua University, and Beijing.
- NeurIPS 2021 Outstanding Reviewer Award
- National Scholarship for PhDs, 2021
- **Ranked 275 globally at AI2000 in ICML.** [Link](#)
- Bytedance Scholarship, Bytedance, 2022
- Baidu Scholarship, Baidu, 2022
- [2023 Apple Scholars in AI/ML PhD fellowship](#)

Open-Source Contribution

If you are working with AI/ML, there are probably some lines of code in your computer/server that are written by me!

I'm a core developer for:

 [vllm](#)

A high-throughput and memory-efficient inference and serving engine for LLMs

 Python  23.4k  3.3k

 [tianshou](#)

An elegant PyTorch deep reinforcement learning library.

 Python  7.6k  1.1k

I'm a collaborator and constantly contribute to:

 [pytorch](#)

Tensors and Dynamic neural networks in Python with strong GPU acceleration

 Python  80.6k  21.7k

I contribute a language server protocol (LSP) to triton:

 [triton](#)

Development repository for the Triton language and compiler

 C++  12.1k  1.4k

I have many other random contributions to the following famous open-source projects:

llvm-project

The LLVM Project is a collection of modular and reusable compiler and toolchain technologies.

 LLVM  27.1k  11.1k

antlr4

ANTLR (ANother Tool for Language Recognition) is a powerful parser generator for reading, processing, executing, or translating structured text or binary files.

 Java  16.7k  3.2k

mmcv

OpenMMLab Computer Vision Foundation

 Python  5.8k  1.6k

mmengine

OpenMMLab Foundational Library for Training Deep Learning Models

 Python  1.1k  331

mmdetection

OpenMMLab Detection Toolbox and Benchmark

 Python  28.7k  9.3k

tiktoken

tiktoken is a fast BPE tokeniser for use with OpenAI's models.

 Python  11.2k  758

vision

Datasets, Transforms and Models specific to Computer Vision

 Python  15.8k  6.9k

Publication

Note: * indicates equal contribution with the second author.

Journal Articles

- **From Big to Small: Adaptive Learning to Partial-Set Domains** [TPAMI](#) [arxiv](#) [IEEE Xplore](#)
 - **Kaichao You***, Zhangjie Cao, Ziyang Zhang, Jianmin Wang, Mingsheng Long
- **Ranking and Tuning Pre-trained Models: A New Paradigm for Exploiting Model Hubs** [JMLR](#) [paper](#) [code](#)
 - **Kaichao You**, Yong Liu, Ziyang Zhang, Jianmin Wang, Michael I. Jordan, Mingsheng Long
- **Tianshou: A Highly Modularized Deep Reinforcement Learning Library** [JMLR](#) [arxiv](#) [code](#)
 - Jiayi Weng, Huayu Chen, Dong Yan, **Kaichao You**, Alexis Duburcq, Minghao Zhang, Hang Su, Jun Zhu
 - Github  Stars  7.6k
 - Core developers
- **Event-based Semantic Segmentation with Posterior Attention** [TIP](#) [IEEE](#) [Xplore](#)
 - Zexi Jia, **Kaichao You***, Weihua He, Yang Tian, Yongxiang Feng, Yaoyuan Wang, Xu Jia, Yihang Lou, Jingyi Zhang, Guoqi Li, Ziyang Zhang

Conference Proceedings

- **Universal Domain Adaptation** [CVPR2019](#)
 - **Kaichao You**, Mingsheng Long, Zhangjie Cao, Jianmin Wang, Michael I. Jordan
- **Learning to Transfer Examples for Partial Domain Adaptation** [CVPR2019](#)

- **Kaichao You***, Zhangjie Cao, Mingsheng Long, Jianmin Wang, Qiang Yang
- **Towards Accurate Model Selection in Deep Unsupervised Domain Adaptation** [ICML2019](#)
 - **Kaichao You**, Ximei Wang, Mingsheng Long, Michael I. Jordan
- **Stochastic Normalization** [NeurIPS2020](#)
 - **Kaichao You***, Zhi Kou, Mingsheng Long, Jianmin Wang
- **Co-Tuning for Transfer Learning** [NeurIPS2020](#)
 - **Kaichao You**, Zhi Kou, Mingsheng Long, Jianmin Wang
 - Second Prize of [Spectra Review Paper Competition](#), see the [blog](#)
- **LogME: Practical Assessment of Pre-trained Models for Transfer Learning** [ICML2021](#)
 - **Kaichao You**, Yong Liu, Jianmin Wang, Mingsheng Long
 - Included in [Google Research](#).
- **TimeReplayer: Unlocking the Potential of Event Cameras for Video Interpolation** [CVPR2022](#) [arxiv](#)
 - Weihua He, **Kaichao You**, Zhendong Qiao, Xu Jia, Ziyang Zhang, Wenhui Wang, Huchuan Lu, Yaoyuan Wang, Jianxing Liao
 - Selected by [Prophesee](#) as a representative method in event-based slow motion. [Blog](#)
- **Video Interpolation by Event-driven Anisotropic Adjustment of Optical Flow** [ECCV2022](#) [arxiv](#)
 - Song Wu, **Kaichao You***, Weihua He, Chen Yang, Yang Tian, Yaoyuan Wang, Jianxing Liao, Ziyang Zhang
- **Test-Time Training-Free Domain Adaptation** [ICASSP 2023](#)(<https://2023.ieeeicassp.org/>) [IEEE Xplore](#)(<https://ieeexplore.ieee.org/abstract/document/10096430>)
 - Yongxiang Feng, Weihua He, **Kaichao You**, Bing Liu, Ziyang Zhang, Yaoyuan Wang, Minglei Li, Yihang Lou, Jiawei Li, Guoqi Li, Jianxing Liao
- **Efficient ConvBN Blocks for Transfer Learning and Beyond** [ICLR 2024](#)(<https://openreview.net/forum?id=IHZm9vNm5H>) [[arxiv](#)] [[code](#)]
 - **Kaichao You**, Guo Qin, Anchang Bao, Meng Cao, Ping Huang, Jiulong Shan, Mingsheng Long
 - This feature has been already integrated into [MMCV](#) and [PyTorch](#). It is available starting from PyTorch 2.2.

Professional Activities

- PC Member | Reviewer
 - TNNLS / WACV / IJCAI / AAAI / IEEE TIP / Neurocomputing / IEEE TPAMI / ICCV / CVPR / ICLR / ICML / NeurIPS

Invited Talks

- Present oral talks and posters at [MLA 2019](#), November 2nd - 3rd 2019
- **Advances in Domain Adaptation: Setting, Method and Model Selection** at [BAAI Live](#), Dec. 24, 2019
 - [Video Link](#)
- **LogME: Practical Assessment of Pre-trained Models for Transfer Learning** at [BAAI Live](#), Mar. 10, 2021
- **Efficient Transfer Learning Across Data, Model, and Modality** at Apple APAC AI/ML tech talk. Mar. 9, 2023

Competition

- **VisDA2018** Classification Track, 3rd place

Experiences

- Internship at Apple, AIML
 - From 2023/02 to 2024/02
 - Beijing, China
 - Machine learning / Data-centric learning

