Yujun Shi

Contact Information

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Scholar: https://scholar.google.com/citations?user=Okeolr8AAAAJ&hl=en

Research Interests

Federated Learning, Continual Learning, Machine Learning, Computer Vision.

Education

2021–Present **Ph.D in Machine Learning:** National University of Singapore
Advisors: **Assoc. Prof. Vincent Y. F. Tan & Dr. Jiashi Feng**

2015–2019 **B.S. in Computer Science:** Nankai University
GPA: 92.14/100, Rank: 1/93   Advisor: **Prof. Mingming Cheng**

Internship Experience

2021–present **Research Intern:** Bytedance
Topic: Federated/Continual Learning   Mentor: **Dr. Song Bai**

Publications

ICLR'23 **Yujun Shi**, Song Bai, Jian Liang, Wenqing Zhang, Vincent Y. F. Tan. Towards Understanding and Mitigating Dimensional Collapse in Heterogeneous Federated Learning.

CVPR'22 **Yujun Shi**, Kuangqi Zhou, Jian Liang, Zihang Jiang, Jiashi Feng, Philip Torr, Song Bai, Vincent Y. F. Tan. Mimicking the Oracle: An Initial Phase Decorrelation Approach for Class Incremental Learning.

NeurIPS'21 Zihang Jiang, Qibin Hou, Li Yuan, Daquan Zhou, **Yujun Shi**, Xiaojie Jin, Anran Wang, Jiashi Feng. All Tokens Matter: Token Labeling for Training Better Vision Transformers.

ArXiv'21 Daquan Zhou, **Yujun Shi**, Bingyi Kang, Weihao Yu, Zihang Jiang, Yuan Li, Xiaojie Jin, Qibin Hou, Jiashi Feng. Refiner: Refining Self-attention for Vision Transformers.

ICCV'21 Li Yuan, Yunpeng Chen, Tao Wang, Weihao Yu, **Yujun Shi**, Zihang Jiang, Francis EH Tay, Jiashi Feng, Shuicheng Yan. Tokens-to-Token ViT: Training Vision Transformers from Scratch on ImageNet.

CVPR'21 **Yujun Shi**, Li Yuan, Yunpeng Chen, Jiashi Feng. Continual Learning via Bit-Level Information Preserving.

TPAMI Yun Liu, Yuhuan Wu, Peisong Wen, **Yujun Shi**, Ming-Ming Cheng. Leveraging Instance-, Image- and Dataset-Level Information for Weakly Supervised Instance Segmentation. IEEE Transactions on Pattern Analysis and Machine Intelligence.

ArXiv'19 **Yujun Shi**, Benben Liao, Guangyong Chen, Yun Liu, Ming-Ming Cheng, Jiashi Feng. Understanding Adversarial Behavior of DNNs by Disentangling Non-Robust and Robust Components in Performance Metric.

ArXiv'19 Guangyong Chen, Pengfei Chen, **Yujun Shi**, Chang-Yu Hsieh, Benben Liao, Shengyu Zhang. Rethinking the usage of batch normalization and dropout in the training of deep neural networks.

Relevant Courses

EE6139 Information Theory and its Applications

EE5137 Stochastic Process

IE6520 Theory and Algorithms for Online Learning

Skills

Programming Python, C++/C(CUDA), Java

Packages Pytorch, TensorFlow, Caffe, OpenCV

Honors & Awards

2022–2025 NUS Research Scholarship

2019 4-th place in MineRL@NeurIPS2019 competition

2017, 2018 Nankai First Class Scholarship Award

2016 National Scholarship Award

2016 Outstanding Award in Tianjin Math Contest for College Students

English Scores

IELTS 7.5(overall) 8.0(reading) 8.5(listening) 7.0(speaking) 7.0(writing)

TOEFL 105

GRE 321(verbal and reasoning) + 4(writing)