#### Contact Information

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

## Research Interests

Representation Learning, Federated Learning, Continual Learning.

# 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)