

# Dapeng Hu

+65-90747349 | lhxxhb15@gmail.com | Scholar | Homepage | LinkedIn

## EDUCATION

---

### National University of Singapore

*Ph.D. in Signal Analysis & Machine Intelligence*

Advisor: Xinchao Wang

Singapore

*January 2019 – January 2023*

### Nanjing University

*B. Sc. in Electronic Information Science and Technology*

GPA: 4.47/5.00, Rank: 3/56

Nanjing, China

*August 2013 – June 2017*

## PUBLICATIONS

---

UMAD: Universal Model Adaptation under Domain and Category Shift

Jian Liang\*, **Dapeng Hu\***, Jiashi Feng, Ran He

*arXiv, 2021* [PDF]

DINE: Domain Adaptation from Single and Multiple Black-box Predictors

Jian Liang, **Dapeng Hu**, Jiashi Feng, Ran He

*IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2022* [PDF]

How Well Does Self-Supervised Pre-Training Perform with Streaming Data?

**Dapeng Hu\***, Shipeng Yan\*, Qizhengqiu Lu, Lanqing Hong<sup>†</sup>, Hailin Hu, Yifan Zhang, Zhenguo Li, Xinchao Wang<sup>†</sup>, Jiashi Feng

*International Conference on Learning Representations (ICLR), 2022* [PDF]

Adversarial Domain Adaptation With Prototype-Based Normalized Output Conditioner

**Dapeng Hu**, Jian Liang<sup>†</sup>, Hanshu Yan, Qibin Hou, Yunpeng Chen

*IEEE Transactions on Image Processing (TIP), 2021* [PDF]

Source Data-absent Unsupervised Domain Adaptation through Hypothesis Transfer and Labeling Transfer

Jian Liang, **Dapeng Hu**, Yunbo Wang, Ran He, Jiashi Feng

*IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 2021* [PDF]

No Fear of Heterogeneity: Classifier Calibration for Federated Learning with Non-IID Data

Mi Luo, Fei Chen, **Dapeng Hu**, Yifan Zhang, Jian Liang, Jiashi Feng

*Advances in Neural Information Processing Systems (NeurIPS), 2021* [PDF]

Unleashing the Power of Contrastive Self-Supervised Visual Models via Contrast-Regularized Fine-Tuning

Yifan Zhang, Bryan Hooi, **Dapeng Hu**, Jian Liang, Jiashi Feng

*Advances in Neural Information Processing Systems (NeurIPS), 2021* [PDF]

Domain Adaptation with Auxiliary Target Domain-Oriented Classifier

Jian Liang, **Dapeng Hu**, Jiashi Feng

*IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2021* [PDF]

Do We Really Need to Access the Source Data? Source Hypothesis Transfer for Unsupervised Domain Adaptation

Jian Liang, **Dapeng Hu**, Jiashi Feng

*International Conference on Machine Learning (ICML), 2020* [PDF]

A Balanced and Uncertainty-aware Approach for Partial Domain Adaptation

Jian Liang, Yunbo Wang, **Dapeng Hu**, Ran He, Jiashi Feng

*European Conference on Computer Vision (ECCV), 2020* [PDF]

## EXPERIENCE

---

**TikTok** Singapore  
*Research Intern* November 2021 – Present

- Developed efficient fine-tuning algorithms based on released self-supervised pre-trained models.

**Huawei Noah's Ark Lab** Singapore  
*Research Intern (Remote)* October 2020 - March 2021

- Conducted the first thorough empirical study on practical continual self-supervised pre-training.
- The research paper has been accepted to *International Conference on Learning Representations, 2022*.

**YITU Tech** Singapore  
*Research Intern* December 2019 - March 2020

- Developed a generic domain adaptation method for both image classification and segmentation.
- The research paper has been published in *IEEE Transactions on Image Processing, 2021*.

**National University of Singapore** Singapore  
*Research Engineer* March 2018 - January 2019

- Co-organized the *MHP* challenge with *CVPR 2018 L.I.P* workshop.
- Participated in *Google AI Open Images - Object Detection Track* and achieved 11th out of 452 teams.

**Nanjing SkyData InfoTech Ltd.** Nanjing, China  
*Data Mining Engineer* July 2017 - March 2018

- Responsible for medical image diagnosis using deep learning methods such as *U-Net*.

## PROFESSIONAL SERVICE

---

**Reviewer**  
*ICML 2021-2022, NeurIPS 2021-2022, CVPR 2022, ICLR 2022-2023, TMLR 2022*

**Teaching Assistant**

<i>NUS EE6934: Deep Learning (Advanced)</i>	<i>2020 Spring</i>
<i>NUS EE5934: Deep Learning</i>	<i>2020 Spring</i>
<i>NUS EE4704: Image Processing and Analysis</i>	<i>2019 Fall</i>
<i>NUS EE2028: Microcontroller Programming and Interfacing</i>	<i>2019 Fall</i>

## AWARDS & HONORS

---

<i>ICML Outstanding Reviewers (Top 10%)</i>	<i>2022</i>
<i>NUS Research Scholarship</i>	<i>2019-2023</i>
<i>Outstanding Graduate of Nanjing University</i>	<i>2017</i>
<i>Yang Scholarship</i>	<i>2015</i>
<i>People's Scholarship</i>	<i>2014</i>
<i>Merit Student of Jiangsu Province</i>	<i>2013</i>

## TECHNICAL SKILLS

---

**Programming Languages:** Python, Java, C/C++, MATLAB, HTML/CSS, Bash

**Tools and Frameworks:** L<sup>A</sup>T<sub>E</sub>X, Git, PyTorch, TensorFlow