# Guodong DU

#### RESEARCH INTEREST

- Knowledge Enhancement: Knowledge Fusion and Alignment of LLMs and MLLMs.
- Knowledge Efficiency: Knowledge Distillation and Compression of LLMs and MLLMs.
- Others: Spiking Neural Network, Low Level Computer Vision.

## **EDUCATION**

University of Electronic Science and Technology of China (UESTC)

Chengdu, China

Bachelor's degree program, GPA: 3.90/4.0, Rank: 12/550 (top 3%)

Aug. 2014-Jun. 2018

City University of Hong kong (CityU)

Hongkong, China

Non-degree Undergraduate Exchange, GPA:4.0/5.0

Aug.2016-Jan.2017

# SELECTED PUBLICATION

1. <u>Guodong Du</u>, Junlin Lee, Jing Li, Sim Kuan Goh, Ho-Kin Tang, Min Zhang.

Parameter Competition Balancing for Model Merging.

Conference on Neural Information Processing Systems (NeurIPS 2024).

2. Guodong Du, Jing Li, Sim Kuan Goh, Ho-Kin Tang.

Knowledge Fusion By Evolving Weights of Language Models.

Annual Meeting of the Association for Computational Linguistics (ACL 2024 Findings).

3. Guodong Du, Runhua Jiang, Sim Kuan Goh, Ho-Kin Tang.

Impacts of Darwinian Evolution on Pre-trained Deep Neural Networks.

Conference on Systems, Man, and Cybernetics (IEEE SMC 2024).

#### RESEARCH EXPERIENCE

Knowledge and Language Computing Lab, HITSZ

Research Assistant

Supervisor: Prof. Jing Li

Mar.2023 - Sep.2024

- Knowledge fusion, editing and preference learning.
- Multi-modality LLM knowledge fusion and decouple.

Learning and Vision Lab, ECE, NUS

Aug.2018 - Sep.2021

Supervisor: Prof. Jiashi Feng

Research Intern

- Low-level computer vision.
- Efficient and lightweight model architecture.

Huawei Noah's Ark Lab, Shenzhen, China

Research Intern

Mentor: Xueyi Zou Auq.2020 - Apr.2021

• Video super-resolution, optical flow.

• Image signal processing(ISP).

## WORK EXPERIENCE

## BioMind, Singapore

Machine Learning Researcher

Advisor: Prof. Jiashi Feng

Dec.2018 - Aug.2019

- Tumor image segmentation, biopsy detection.
- Face anti-spoofing, pose estimation.
- Clinical decision support system, video analysis for Pakinsen-plus.

# YoueData, Chengdu, China

Software Engineer

Advisor: Prof. Lixin Duan

Jan.2018 - Jun.2018

- Recommendation algorithms, collaborative filtering algorithms.
- Java development.

## AWARDS AND CERTIFICATES

- 2021.10, 3rd Place Award in NTIRE 2021 Challenge on Video Super-resolution Track 1 Spatial. (New Trends in Image Restoration and Enhancement Workshop, CVPR2021);
- 2017.09, National Encouragement scholarship;
- 2016.05, Honorable Award in MCM (The Mathematical Contest in Modeling);
- 2016.09, National Encouragement scholarship;
- 2015.09, National scholarship;

## ACADEMIC SERVICES

Conference Reviewer: ICLR 24-25, NeurIPS 23-24, ACL 24, etc. Teaching Assistant: EE5907 Pattern Recognition (NUS ECE)