# Shunlin Lu

First-year Ph.D. Student

Computer Science, The Chinese University of Hongkong (Shenzhen)

## 

Mobile: (+86) 176-2160-1826☑ GitHub, Google Scholar

#### Education

• The Chinese University of Hongkong, Shenzhen (CUHK-SZ)

P.R. China

First-year Ph.D. Student of Computer Science

09/2023 - now

Supervisor: Prof. Ruimao Zhang and Prof. Benyou Wang

Research: Multi-Modal LLMs, Character Animation, Motion Generation/Understanding, and Machine Learning

• University of Southern California (USC)

The U.S.

Master of Electrical Engeering

01/2020 - 01/2023

GPA: 3.87/4.0; Viterbi Honor Student

Supervisor: Dr.Souvik Kundu (Intel AI lab)

Research: energy-efficient, robust, and privacy-aware machine learning for computer vision

• Wuhan University of Technology

P.R. China

Bachelor of Electrical Information Engeering

GPA: 3.65/5.0; top 5%

09/2015 - 06/2019

#### Internship

• International Economy Digital Academy (IDEA Research)

P.R. China 01/2023 - now

Computer Vision Research Intern, Computer Vision and Robotics Center

Supervisor: Dr. Ailing Zeng, and Dr. Lei Zhang

project: Human-centric Multi-Modal learning

### PREPRINTS

• HumanTOMATO: Text-aligned Whole-body Motion Generation

Shunlin Lu\*, Ling-Hao CHEN\*, Ailing Zeng, Jing Lin, Ruimao Zhang, Lei Zhang, Heung-Yeung Shum

Arxiv preprint 2023 motion

[paper] | [preprint] | [project page] | [code] | [video] | [retrieval demo]

• HumanPerformer: Synthesizing a Long Motion Sequence from a Story with a Text2Motion Retriever

Ling-Hao CHEN\*, Shunlin Lu\*, Yukai Shi, Ailing Zeng, Ruimao Zhang, Lei Zhang

Arxiv preprint 2024 LLM motion

[video1] | [video2] | [retrieval demo]

#### **PUBLICATIONS**

• Motion-x: A large-scale 3d expressive whole-body human motion dataset

Jing Lin\*, Ailing Zeng\*, **Shunlin Lu**\*, Yuanhao Cai, Ruimao Zhang, Haoqian Wang, Lei Zhang Advances in Neural Information Processing Systems (NeurIPS 2023) motion

[paper] | [preprint] | [project page] | [code] | [visualization] | [video1] | [video2]

• Learning to linearize deep neural networks for secure and efficient private inference

Souvik Kundu\*, **Shunlin Lu**\*, Yuke Zhang, Jacqueline T.Liu, Peter A.Beerel

International Conference on Learning Representations (ICLR 2023) Efficient Learning [paper] | [preprint]

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Sparse mixture once-for-all adversarial training

for efficient in-situ trade-off between accuracy and robustness of dnns

Souvik Kundu, Sairam Sundaresan, Sharath Nittur Sridhar, **Shunlin Lu**, Han Tang, Peter A. Beerel International Conference on Acoustics, Speech and Signal Processing (ICASSP 2023) Efficient Learning [paper] | [preprint]

P2M-DeTrack: Processing-in-Pixel-in-Memory

for Energy-efficient and Real-Time Multi-Object Detection and Tracking

Gourav Datta, Souvik Kundu, Zihan Yin, Joe Mathai, Zeyu Liu, Zixu Wang, Shunlin Lu, Ravi Lakkireddy,

Andrew Schmidt, Wael Abd-Almageed, Ajey Jacob, Akhilesh Jaiswal, Peter Beerel

IFIP/IEEE 30th International Conference on Very Large Scale Integration (VLSI-SoC 2022) Efficient Learning

[paper] | [preprint] (best paper nomination)

#### Honors and Awards

• Honored graduate student of Viteibi School of USC (less than 5%)

Jan. 2023

• First-Class Scholarship of WHUT university

Dec. 2017

• First-Class Scholarship of WHUT university

Dec. 2016