Shunlin Lu

First-year Ph.D. Student

Computer Science, The Chinese University of Hongkong (Shenzhen) EDUCATION

➤ Email: shunlinlu0803@gmail.com

GitHub, Google Scholar

↑ Homepage: https://shunlinlu.github.io/

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

First-year Ph.D. Student of Computer Science

P.R. China 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

09/2015 - 06/2019

GPA: 3.65/5.0; top 5%

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

• 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

• HumanTOMATO: Text-aligned Whole-body Motion Generation

Shunlin Lu*, Ling-Hao CHEN*, Ailing Zeng, Jing Lin, Ruimao Zhang, Lei Zhang, Heung-Yeung Shum International Conference on Machine Learning (ICML 2024) motion

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

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]

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