

# Shunlin Lu

Ph.D. Student

Computer Science, The Chinese University of Hongkong (Shenzhen)

EDUCATION

🏠 Homepage: <https://shunlinlu.github.io/>

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🔗 [GitHub](#), [Google Scholar](#)

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- **The Chinese University of Hongkong, Shenzhen (CUHK-SZ)** P.R. China  
Ph.D. Student of Computer Science 09/2023 - now  
Supervisor: [Prof. Ruimao Zhang](#) and [Prof. Benyou Wang](#)  
Research: Humanoid Robot, Character Animation, Multi-Modal Motion Generation/Understanding
  - **University of Southern California (USC)** The U.S.  
Master of Electrical Engineering 09/2019 - 01/2022  
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 Engineering 09/2015 - 06/2019  
GPA: 3.65/5.0; top 5%

## INTERNSHIP

- 
- **International Economy Digital Academy (IDEA Research)** P.R. China  
Computer Vision Research Intern, Computer Vision and Robotics Center 01/2023 - 05/2024  
Supervisor: [Dr. Ailing Zeng](#), and [Dr. Lei Zhang](#)  
project: Human-centric Multi-Modal learning
  - **Shanghai Artificial Intelligence Laboratory** P.R. China  
Research Intern, Embodied AI Center 05/2024 - now  
Supervisor: [Dr. Jingbo Wang](#)  
project: Humanoid Robots, Character Animation

## 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  
[\[video1\]](#) | [\[video2\]](#) | [\[retrieval demo\]](#)
  - **Behavior Foundation Model for Humanoid Robots (Submit to ICRA 2025)**  
Weishuai Zeng, **Shunlin Lu**, Kangning Yin, Jingbo Wang, Jiangmiao Pang Humanoid Robot  
Arxiv preprint 2025

## PUBLICATIONS

- 
- **MotionLLM: Understanding Human Behaviors from Human Motions and Videos**  
Ling-Hao CHEN\*, **Shunlin Lu\***, Ailing Zeng, Hao Zhang, Benyou Wang, Ruimao Zhang, Lei Zhang  
T-pami 2025 video LLM motion  
[\[paper\]](#) | [\[preprint\]](#) | [\[project page\]](#) | [\[code\]](#)
  - **ARMO: Autoregressive Rigging for Multi-Category Objects**  
Mingze Sun, Shiwei Mao, Keyi Chen, Yurun Chen, **Shunlin Lu**, Jingbo Wang, Juntong Dong, Ruqi Huang  
InternationalConference on Computer Vision (ICCV 2025) motion  
[\[preprint\]](#)
  - **Go to Zero: Towards Zero-shot Motion Generation with Million-scale Data**  
Ke Fan, **Shunlin Lu**, Minyue Dai, Runyi Yu, Lixing Xiao, Zhiyang Dou, Juntong Dong, Lizhuang Ma, Jingbo Wang  
InternationalConference on Computer Vision (ICCV 2025 highlight) motion  
[\[preprint\]](#) | [\[github\]](#)
  - **MotionStreamer: Streaming Motion Generation via Diffusion-based Autoregressive Model in Causal Latent Space**  
Lixing Xiao, **Shunlin Lu**, Huaijin Pi, Ke Fan, Liang Pan, Yueer Zhou  
Ziyong Feng, Xiaowei Zhou, Sida Peng, Jingbo Wang  
InternationalConference on Computer Vision (ICCV 2025) motion  
[\[paper\]](#) | [\[preprint\]](#) | [\[project page\]](#) | [\[code\]](#) | [\[Motion Representation\]](#)
  - **ScaMo: Exploring the Scaling Law in Autoregressive Motion Generation Model**  
**Shunlin Lu**, Jingbo Wang, Zeyu Lu, Ling-Hao Chen, Wenxun Dai, Juntong Dong, Zhiyang Dou Bo Dai, Ruimao Zhang  
Conference on Computer Vision and Pattern Recognition (CVPR 2025) motion  
[\[paper\]](#) | [\[preprint\]](#) | [\[project page\]](#) | [\[code\]](#)

- **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

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- **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*