Shuangrui Ding

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EDUCATION

Department of Information Engineering, The Chinese University of Hong Kong Sept 2023 – June 2027
Ph.D. in Information Engineering, Advisor: Prof. Dahua Lin Hong Kong, China

Department of Electrical Engineering, Shanghai Jiao Tong University Sept 2021 – June 2023
M.S. in Information and Communication Engineering, Advisor: Prof. Hongkai Xiong Shanghai, China

College of Engineering, University of Michigan Sept 2019 – May 2021
B.S.E. in Computer Science, GPA: 3.9/4.0 Ann Arbor, Michigan

UM-SJTU Joint Institute, Shanghai Jiao Tong University Sept 2017 – Aug 2021
B.S.E in Electrical and Computer Engineering, GPA: 3.8/4.0 Shanghai, China

INDUSTRY EXPERIENCE

Meta Superintelligence Labs, Research Scientist Intern London, UK
Work on SAM 3, supervised by Nicolas Carion. May 2025 – Oct 2025

Shanghai AI Lab, Research Intern Shanghai, China
Work on Multi-modality LLMs, supervised by Jiaqi Wang. May 2023 – May 2025

Huawei Inc., Research Intern Shanghai, China
Work on Video Representation Learning Aug 2022 – May 2023

Tencent AI Lab, Research Intern Shenzhen, China
Work on Self-supervised Video Representation Learning Feb 2021 – Aug 2021

SELECTED PUBLICATION (* INDICATES EQUAL CONTRIBUTION)

[1] SAM 3 Team: **Shuangrui Ding (Intern Contributor)** Contribution: Multi-modal interactivity & video grounding. *SAM 3: Segment Anything with Concepts*. **ICLR 2026.**

[2] Zhixiong Zhang*, **Shuangrui Ding***, Xiaoyi Dong, Songxin He, Jianfan Lin, Junsong Tang, Yuhang Zang, Yuhang Cao, Dahua Lin, Jiaqi Wang. *SeC: Advancing Complex Video Object Segmentation via Progressive Concept Construction*. **ICLR 2026.**

[3] **Shuangrui Ding**, Rui Qian, Xiaoyi Dong, Pan Zhang, Yuhang Zang, Yuhang Cao, Yuwei Guo, Dahua Lin, Jiaqi Wang. *SAM2Long: Enhancing SAM2 for Long Video Segmentation with a Training-Free Memory Tree*. **ICCV 2025.**

[4] Rui Qian*, **Shuangrui Ding***, Xiaoyi Dong, Pan Zhang, Yuhang Zang, Yuhang Cao, Dahua Lin, Jiaqi Wang. *Dispider: Enabling Video LLMs with Active Real-Time Interaction via Disentangled Perception, Decision, and Reaction.* **CVPR 2025.**

[5] **Shuangrui Ding***, Rui Qian*, Haohang Xu, Dahua Lin, Hongkai Xiong. *Betrayed by Attention: A Simple yet Effective Approach for Self-supervised Video Object Segmentation*. **ECCV 2024.**

[6] **Shuangrui Ding**, Peisen Zhao, Xiaopeng Zhang, Rui Qian, Hongkai Xiong, Qi Tian. *Prune Spatio-temporal Tokens by Semantic-aware Temporal Accumulation*. **ICCV 2023.**

[7] **Shuangrui Ding**, Rui Qian, Hongkai Xiong. *Dual Contrastive Learning for Spatio-temporal Representation*. **ACM MM 2022**.

[8] **Shuangrui Ding**, Maomao Li, Tianyu Yang, Rui Qian, Haohang Xu, Qingyi Chen, Jue Wang, Hongkai Xiong. *Motion-aware Contrastive Video Representation Learning via Foreground-background Merging*. **CVPR 2022**.

[9] Jiaqi Ma*, **Shuangrui Ding***, Qiaozhu Mei. *Towards More Practical Adversarial Attacks on Graph Neural Networks*. **NeurIPS 2020**.

[10] **Shuangrui Ding***, Zihan Liu*, Xiaoyi Dong, Pan Zhang, Rui Qian, Conghui He, Dahua Lin, Jiaqi Wang. *SongComposer: A Large Language Model for Lyric and Melody Composition in Song Generation*. **ACL 2025 Main.**

[11] Long Xing, Qidong Huang, Xiaoyi Dong, Pan Zhang, Yuhang Zang, Yuhang Cao, Jinsong Li, **Shuangrui Ding**, Weiming Zhang, Nenghai Yu, Jiaqi Wang, Feng Wu, Dahua Lin. *ScaleCap: Scalable Image Captioning via Dual-Modality Debiasing*. **ICLR 2026.**

[12] Zihan Liu, **Shuangrui Ding**, Zhixiong Zhang, Xiaoyi Dong, Pan Zhang, Yuhang Zang, Yuhang Cao, Dahua Lin, Jiaqi Wang. *SongGen: A Single Stage Auto-regressive Transformer for Text-to-Song Generation*. **ICML 2025.**

[13] Junbo Niu, Yifei Li, Ziyang Miao, Chunjiang Ge, Zhou Yuanhang, Qihao He, Xiaoyi Dong, Haodong Duan, **Shuangrui Ding**, Rui Qian, Pan Zhang, Yuhang Zang, Yuhang Cao, Conghui He, Jiaqi Wang. *OVO-Bench: How Far is Your Video-LLMs from Real-World Online Video Understanding?* **CVPR 2025.**

[14] Yuwei Guo, Ceyuan Yang, Anyi Rao, Chenlin Meng, Omer Bar-Tal, **Shuangrui Ding**, Maneesh Agrawala, Dahua Lin, Bo Dai. *VideoRepainter: Creative Video Inpainting with Keyframe Reference.* **CVPR 2025.**

[15] Rui Qian, Xiaoyi Dong, Pan Zhang, Yuhang Zang, **Shuangrui Ding**, Dahua Lin, Jiaqi Wang. *Streaming Long Video Understanding with Large Language Models.*. **NeurIPS 2024.**

[16] Rui Qian, **Shuangrui Ding**, Dahua Lin. *Rethinking Image-to-Video Adaptation: An Object-centric Perspective*. **ECCV 2024.**

[17] Han Li, Shaohui Li, **Shuangrui Ding**, Wenrui Dai, Maida Cao, Chenglin Li, Junni Zou, Hongkai Xiong. *Image Compression for Machine and Human Vision with Spatial-Frequency Adaptation*. **ECCV 2024.**

[18] Li Ding, Wen Fei, Yuyang Huang, **Shuangrui Ding**, Wenrui Dai, Chenglin Li, Junni Zou, Hongkai Xiong. *AMPA: Adaptive Mixed Precision Allocation For Low-Bit Integer Training*. **ICML 2024.**

[19] Rui Qian, **Shuangrui Ding**, Xian Liu, Dahua Lin. *Semantics Meets Temporal Correspondence: Self-supervised Object-centric Learning in Videos*. **ICCV 2023.**

[20] Rui Qian, **Shuangrui Ding**, Xian Liu, Dahua Lin. *Static and Dynamic Concepts for Self-supervised Video Representation Learning*. **ECCV 2022**.

[21] Rui Qian, Yuxi Li, Huabin Liu, John See, **Shuangrui Ding**, Xian Liu, Dian Li, Weiyao Lin. *Enhancing Self-supervised Video Representation Learning via Multi-level Feature Optimization*. **ICCV 2021**.

INVITED TALKS

ICCV 2025 LSVOS Workshop | *Keynote Speaker* — Honolulu, Hawaii
From Pixels to Meaning: Towards Reliable Video Object Segmentation across Frames

AWARDS & HONORS

CUHK Vice-Chancellor's Ph.D. Scholarship (80,000 HKD)	Mar 2023
Graduate National Scholarship (Top 2%)	Sep 2022
Shanghai Outstanding Graduates (Top 5%)	May 2021
UM Deans List	Dec 2019, Dec 2020
SJTU Undergraduate Excellent Scholarship	Nov 2018, Nov 2019
Undergraduate National Scholarship (Top 2%)	Sep 2018

SKILLS & SERVICES

Languages: Chinese (Native), English (Fluent, TOEFL 101)
Programming: C/C++, Python (PyTorch), Java, HTML/CSS, SQL, MATLAB, LaTeX
Conference Reviewer:
- **Computer Vision**: ECCV, CVPR, ICCV
- **Machine Learning**: NeurIPS, ICLR, AAAI, ICML
- **Natural Language Processing**: ACL
- **Multimedia**: ACM MM