

Yuxin Wen

Senior Researcher · Tencent Hunyuan

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Profile

Senior research scientist at Tencent Hunyuan working on multimodal alignment and motion generation. Lead author of **HY-Motion 1.0**, the first billion-scale Diffusion Transformer flow-matching model for text-to-motion generation, open-sourced under Tencent Hunyuan. Previously contributed to production-grade lip-sync, facial-expression, and upper-body motion driving systems for flagship games at Tencent. Authored top-venue research in computer vision and machine learning (TPAMI ×3, CVPR ×3, ICML ×1).

Education

Ph.D. in Information and Communication Engineering 2017–2022
South China University of Technology (SCUT) Guangzhou, China

- Advised by Prof. Kui Jia at the Gorilla Lab.

B.Sc. in Information Engineering, Elite Class 2013–2017
South China University of Technology (SCUT) Guangzhou, China

Professional Experience

Senior Researcher Oct 2022 – Present
Tencent Hunyuan / Tencent AI Lab Shenzhen, China

- Core contributor to research on multimodal alignment and motion generation at Tencent Hunyuan.
- Lead author of **HY-Motion 1.0** — scaled Diffusion Transformer flow matching for text-to-motion generation, with a full-stage training paradigm: large-scale pretraining, supervised fine-tuning on curated data, and reinforcement learning from human feedback with reward models. Open-sourced under Tencent Hunyuan.
- Earlier at Tencent AI Lab: built production-grade lip-sync, facial-expression, and upper-body motion driving systems for flagship games at Tencent.
- **Recognition:** Outstanding performance rating ×1; Tencent Excellence in R&D Award (company-level) ×2.

Research Intern Jun 2021 – Oct 2021
Alibaba DAMO Academy Shenzhen, China

- Research internship under the supervision of Prof. Lei Zhang.

Selected Publications

* *first or co-first author.* † *equal contribution.*

1. ***Yuxin Wen**, Qing Shuai, Di Kang, Jing Li, et al. “HY-Motion 1.0: Scaling Flow Matching Models for Text-to-Motion Generation.” *Tencent Hunyuan Technical Report*, 2025.
2. Haolin Liu, Xiaohang Zhan, Zizheng Yan, Zhongjin Luo, **Yuxin Wen**, Xiaoguang Han. “Stable-SCore: A Stable Registration-based Framework for 3D Shape Correspondence.” *CVPR*, 2025.
3. *Huangzhang Jin[†], **Yuxin Wen**[†], Zihao Wang, Jinjuan Ren, Kui Jia. “Surface Reconstruction from Point Clouds: A Survey and a Benchmark.” *TPAMI*, 2022.
4. *Mingyue Yang[†], **Yuxin Wen**[†], Weikai Chen, Yongwei Chen, Kui Jia. “Deep Optimized Priors for 3D Shape Modeling and Reconstruction.” *CVPR*, 2021.

5. ***Yuxin Wen**, Jiehong Lin, Ke Chen, C.L. Philip Chen, Kui Jia. “Geometry-Aware Generation of Adversarial Point Clouds.” *TPAMI*, 2020.
6. ***Yuxin Wen**[†], Shuai Li[†], Kui Jia. “Towards Understanding the Regularization of Adversarial Robustness on Neural Networks.” *ICML*, 2020.
7. Wenbin Zhao[†], Jiabao Lei[†], **Yuxin Wen**, Jianguo Zhang, Kui Jia. “Sign-Agnostic Implicit Learning of Surface Self-Similarities for Shape Modeling and Reconstruction from Raw Point Clouds.” *CVPR*, 2021.
8. Shuai Li, Kui Jia, **Yuxin Wen**, Tongliang Liu, Dacheng Tao. “Orthogonal Deep Neural Networks.” *TPAMI*, 2019.

Mentorship and Service

- **Mentorship:** Mentored 5–6 research interns at Tencent on multimodal alignment, motion generation, and 3D vision; mentees moved on to top academic and industry positions.
- **Reviewer:** CVPR, ICCV, ECCV, NeurIPS, TPAMI.