

Tianyu Luan

Address 264 Beechnut Ave
Sunnyvale, CA 94085
Website tyluann.github.io

Phone +1 (716) 817-3791
Email tianyulu@buffalo.edu
Google Scholar [XNzPzTIAAAAJ](https://scholar.google.com/citations?user=XNzPzTIAAAAJ)

Profile

Tianyu Luan is a research scientist manager at [Accenture](#). He received his Ph.D. in Computer Science at the [State University of New York at Buffalo](#), Buffalo, NY, United States, advised by [Prof. Junsong Yuan](#). He received a B.S. in Applied Physics at [University of Science and Technology of China](#), and M.Eng. in Electronic and Telecommunication Engineering at [Tsinghua University](#), China. His research interest lies in 3D visual and physical AI. He serves as a conference reviewer/program committee member in CVPR, ICCV, ECCV, NeurIPS, AAAI, IJCAL, and ACM MM. He also serves as a journal reviewer for T-PAMI, T-CSVT, MVA, and T-MM.

Education

- 2021-2025** **State University of New York at Buffalo**, Buffalo, NY, United States
Ph.D., Computer Science.
Research topic: 3D Shape Fidelity Measurement, Recovery, and Creation.
- 2014-2017** **Tsinghua University**, Beijing, China
M.Eng., Electronic Engineering.
Research topic: Visual Light Communication.
- 2009-2013** **University of Science and Technology of China**, Hefei, China
B.S., Applied Physics.

Experiences

- Jun. 2025 - Present** - **Accenture**, Mountain View, CA, United States
Research Scientist.
LLM-based Multi-agent System.
- Jun. 2024 - Aug. 2024** - **Pixocial**, Bellevue, WA, United States
Research Intern. Worked with [Dr. Haoxiang Li](#).
3D human generation.
- Feb. 2024 - May. 2024** - **United Imaging Intelligence**, Burlington, MA, United States
Research Intern. Worked with [Dr. Zhongpai Gao](#) and [Dr. Ziyang Wu](#).
3D human hand reconstruction.
- May. 2023 - Aug. 2023** - **United Imaging Intelligence**, Cambridge, MA, United States
Research Intern. Worked with [Dr. Zhongpai Gao](#) and [Dr. Ziyang Wu](#).
3D human body reconstruction.
- May. 2022 - Aug. 2022** - **OPPO Research**, Palo Alto, CA, United States
Research Intern. Worked with [Dr. Zhong Li](#) and [Dr. Yi Xu](#).
3D hand reconstruction & mesh detailed evaluation.
- Jul. 2019 - Jun. 2021** - **Chinese Academy of Science**, Shenzhen, Guangdong, China
Research Assistant. Worked with [Prof. Yali Wang](#) and [Prof. Yu Qiao](#).
3D human body reconstruction & pose estimation.

Jun. 2017 - HUAWEI Technology Co. Ltd., Shenzhen, Guangdong, China

Apr. 2019 *Multimedia Algorithm Engineer.*

3D human face/object reconstruction R&D.

Selected Publications (✉ for project lead; Click [here](#) for full list.)

- [1]. Sheng Liu, **Tianyu Luan**✉, *et al.*, "SRAM: Shape-Realism Alignment Metric for No Reference 3D Shape Evaluation" *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)*, 2026. [[Paper](#)]
- [2]. **Tianyu Luan**, *et al.*, "Textured Geometry Evaluation: Perceptual 3D Textured Shape Metric via 3D Latent-Geometry Network" *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)*, 2026. [[Paper](#)]
- [3]. Sihan Zhao, Zixuan Wang, **Tianyu Luan**✉, *et al.*, "PP-Motion: Physical-Perceptual Fidelity Evaluation for Human Motion Generation" *Proceedings of the 31st ACM International Conference on Multimedia (ACM-MM)*, 2025. [[Paper](#)][[Code](#)]
- [4]. **Tianyu Luan**, *et al.* "Scalable High-Fidelity 3D Hand Shape Reconstruction via Graph-Image Frequency Mapping and Graph Frequency Decomposition." *IEEE Transactions on Pattern Analysis and Machine Intelligence (T-PAMI)*, doi: 10.1109/ TPAMI.2025.3554516. [[Paper](#)][[Code](#)]
- [5]. Luyuan Xie, **Tianyu Luan**✉, *et al.* "dFLMoE: Decentralized Federated Learning via Mixture of Experts for Medical Data Analysis." *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2025. [[Paper](#)]
- [6]. **Tianyu Luan**, *et al.* "Spectrum AUC Difference (SAUCD): Human-aligned 3D Shape Evaluation." *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*. 2024. [[Paper](#)][[Project](#)][[Code](#)]
- [7]. **Tianyu Luan**, *et al.* "Divide and Fuse: Body Part Mesh Recovery from Partially Visible Human Images." *European Conference on Computer Vision (ECCV)*. Cham: Springer Nature Switzerland, 2024. [[Paper](#)]
- [8]. Luyuan Xie, Manqing Lin, **Tianyu Luan**✉, *et al.* "MH-pFLID: Model Heterogeneous personalized Federated Learning via Injection and Distillation for Medical Data Analysis." *International Conference on Machine Learning (ICML)*, 2024. [[Paper](#)][[Code](#)]
- [9]. **Tianyu Luan**, *et al.* "High Fidelity 3D Hand Shape Reconstruction via Scalable Graph Frequency Decomposition." *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*. 2023. [[Paper](#)][[Code](#)]
- [10]. **Tianyu Luan**, *et al.* "PC-hmr: Pose calibration for 3d human mesh recovery from 2d images/videos." *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)*. 2021. [[Paper](#)]

Teaching

- 21 Fall/22 Spring/22 Fall/24 Fall/25 Spring, Teaching Assistant, Computer Vision and Image Processing (CSE 573), University at Buffalo.
- 22 Spring, Guest Instructor, Seminar (on Computer Vision)(CSE 710), University at Buffalo.

Services

- Conference Review: CVPR'23-'26, ICCV'23'25, ECCV'24, ACM MM'24'25'26, AAAI'25'26, IJCAI'25'26, NeurIPS'25'26.
- Journal Review: T-PAMI, MVA, T-CSVT, T-MM.