# Zhihao Liu

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#### Resume

Hi! This is Zhihao from China. I created this CV mainly to provide detailed information for my past experiences.

### **Education**

The University of Tokyo, PhD Student in Complexity Sci.&Eng.

Apr 2023 - now

• Supervisor: Prof. Naoto Yokoya.

University of Chinese Academy of Sciences, Msc in Computer Science

2018 - 2021

- "Double First-class" Elite University Club, selected by Ministry of Education of China.
- GPA: 3.67/4.0

Northwest A&F University, BEng in Computer Science

2014 - 2018

- "Project 985" & "Double First-class" Elite University Club, selected by Ministry of Education of China.
- GPA: 3.75/4.0 (consistently ranked 1st for 4 years)

### **Employment**

RIKEN AIP 2023-now

Junior Research Assistant, at Geoinformatics Team.

• Work on data-driven 3D generation and reconstruction under the supervision of Prof. Yokoya.

Tencent (Shenzhen) 2021-22

Graphics Researcher, at Game AI Research Center, Tencent IEG.

• During this period, I was engaged in the development of 3D facial motion capture techniques.

# The Hong Kong University of Science and Technology (HKUST). Student (dropout immediately)

2022

• I was a doctoral student with a full scholarship (HK\$ 18,760/month) at the Dept. of CSE, HKUST. However, due to a family matter, I moved to UTokyo after six months of study at HKUST. I deeply appreciate and love both Tokyo and Hong Kong, as well as the people I met there.

### **Publications**

- \* denotes joint first authors.
- [8] Zhihao Liu, Zhanglin Cheng, Naoto Yokoya. "Neural Hierarchical Decomposition for Single Image Plant Modeling." IEEE/CVF Computer Vision and Pattern Recognition Conference (CVPR). 2025.
- [7] <u>Zhihao Liu</u>, ..., *Naoto Yokoya*. "DeepTreeSketch: Neural Graph Prediction for Faithful 3D Tree Modeling from Sketches." ACM CHI conference on Human Factors in Computing Systems (CHI). 2024.
- [6] Y. Li\*, Zhihao Liu\*(equal contribution), Bedrich Benes, ... "SVDTree: Semantic Voxel Diffusion for 3D Tree Generation." IEEE/CVF Computer Vision and Pattern Recognition Conference (CVPR). 2024.
- [5] D. Wu, M. Yang, Zhihao Liu, ... "VRTree: Example-Based 3D Interactive Tree Modeling in Virtual Reality." Computer Graphics Forum (CGF). 2023.
- [4] <u>Zhihao Liu</u>, Fanxing Zhang, Zhanglin Cheng. "BuildingSketch: Freehand Mid-Air Sketching for Building Modeling." IEEE International Symposium on Mixed and Augmented Reality (ISMAR). 2021.
- [3] F. Zhang\*, Zhihao Liu\*(equal contribution), Z. Cheng, O. Deussen, Baoquan Chen, Yunhai Wang. "Mid-Air Finger Sketching for Tree Modeling." IEEE Conference on Virtual Reality and 3D User Interfaces (VR). 2021.
- [2] <u>Zhihao Liu</u>, J. Guo, Y. Wang, Oliver Deussen, Z.Cheng. "Single Image Tree Reconstruction via Adversarial Network." Graphical Models (GM). 2021.

[1] <u>Zhihao Liu</u>, ..., Oliver Deussen, Z. Cheng, D. Wang. "Interactive Modeling of Trees using VR Devices." IEEE International Conference on Virtual Reality and Visualization (ICVRV). 2019.

## **Projects**

Please refer to [this page] to see more personal projects.

# Miscellaneous

Languages: Chinese(native), English(fluent), Japanese(intermediate).

**Programming skills:** C++ (main coding language), OpenGL, DirectX. | C#, Unity. | Python, Pytorch.

Hobbies: Painting (Manga); League of Legends; Genshin.