## YIBO YIN

■ yiboyin@whu.edu.cn · • (+86) 139 4881 2636 · • https://bryceyin13.github.io/

#### **EDUCATION**

Wuhan University Wuhan, China

B.Eng. in Computer Science and Technology

Sept. 2021 - Jun. 2025

• **GPA:** 3.93 /4.00 (top 4%)

### École polytechnique fédérale de Lausanne

Lausanne, Switzerland

M.Sc. in Digital Humanities

Sept. 2025 - Present

#### RESEARCH EXPERIENCE

#### Graphics and Vision Lab, Wuhan University

May. 2023 - Jan. 2024

Advisor: Prof. Chunxia Xiao

Research Assistant

- Assembled a set of equipment with an Intel depth camera and STMicroelectronics ToF sensors, creating a dataset of over 10,000 images and corresponding sensor data.
- Proposed a novel monocular depth estimation method using RGB images and sensor data as input.

**Waterloo Computer Graphics Lab**, remotely at University of Waterloo *June.* 2024 - Aug. 2024 Research Assistant Advisor: Prof. Toshiya Hachisuka

• Reproduced the algorithm in the SIGGRAPH paper *A Practical Walk-on-Boundary Method for Boundary Value Problems* for solving the boundary value problem of Laplace's equation with Dirichlet boundaries.

Computer Graphics Lab, remotely at the University of Texas at Dallas

April. 2024 - Present

Research Assistant

Advisor: Prof. Xiaohu Guo

- Extended the evaluation algorithm in the SIGGRAPH Course Note paper *Evaluation of Loop Subdivision Surfaces* and the SGP paper *Fitting Sharp Features with Loop Subdivision Surfaces* to fragmented medial axis meshes under Loop Subdivision.
- Extended the simplification algorithm in the SIGGRAPH paper *Q-MAT: Computing Medial Axis Transform by Quadratic Error Minimization* to fragmented medial axis meshes.
- Proposed a subdivision surface fitting algorithm in collaboration with advisor, designed to preserve the sharp features of the fragmented medial axis mesh during fitting.

#### **PUBLICATIONS**

# MATStruct: High-Quality Medial Mesh Computation via Structure-aware Variational Optimization

Ningna Wang, Rui Xu, *Yibo Yin*, Zichun Zhong, Taku Komura, Wenping Wang, Xiaohu Guo *ACM SIGGRAPH Asia 2025 (Conference Track)* 

#### **AWARDS**

• Outstanding Student (10% school-wide), Wuhan University

2022, 2023, 2024

• Second Class Scholarship (10% school-wide), Wuhan University

2022

• Third Class Scholarship (15% school-wide), Wuhan University

2023, 2024

• Lei Jun Computer Innovation and Development Fund, Wuhan University

2024

#### TECHNICAL SKILLS

- Languages: Mandarin Chinese (Native Speaker), English (TOEFL iBT 102, R26 | L26 | S23 | W27)
- Programming Languages: C++, C, Python, C#, GLSL, SQL, Verilog HDL, Java
- Library/Framework/Tool/Software: Git, CMake, Nori, Blender, Pbrt-v3, PyTorch