# YIBO YIN

**y**iboyin@whu.edu.cn ⋅ **\** (+86) 139 4881 2636

## **EDUCATION**

Wuhan University Wuhan, China

B.S. in Computer Science and Technology

Sept. 2021 - Present

GPA: 3.94 /4.00 | Average Score: 92.02 /100 | Ranking: 8 /254

## RESEARCH EXPERIENCE

## Graphics and Vision Lab, Wuhan University

May. 2023 - Jan. 2024

Advisor: Prof. Chunxia Xiao

Research Assistant

• Took part in a research project related to monocular depth estimation. Assembled a set of equipment of depth camera and ToF sensors and created a dataset (more than 10k pictures and other sensor data) with it.

**Xiaohu Guo's Graphics Lab**, remotely at the University of Texas at Dallas April. 2024 - Present Research Assistant Advisor: Prof. Xiaohu Guo

• Reproduced the 1998 SIGGRAPH paper Evaluation of Loop Subdivision Surfaces. Cleaned up and coopen-sourced code for the 2015 SIGGRAPH paper Q-MAT: Computing Medial Axis Transform by Quadratic Error Minimization.[Github] Worked on a project about subdivision surface fitting under medial axis transform.

Waterloo Computer Graphics Lab, remotely at University of Waterloo

June. 2024 - Present

Research Assistant

Advisor: Prof. Toshiya Hachisuka

• Reproduced WoB method for Laplace's equation with Dirichlet boundaries in the 2023 SIGGRAPH paper *A Practical Walk-on-Boundary Method for Boundary Value Problems*. Worked on a project about photon density estimator for partial differential equation (PDE) s.

# SELECTED PROJECTS

**Software Renderer** 

Mar. 2023 - May. 2023

• Developed the project for learning knowledge in graphics. Followed the rendering pipeline with programmable vertex & fragment shader, along with some other techniques (shadow mapping, ambient occlusion, etc). [Github]

## **Interactive Ray Tracer**

May. 2023 - June. 2023

• Created as a course project. Equipped with an interactive GUI that users could add spheres with customized metal & dielectrics materials to the scene and render it with Whitted-style Ray Tracing.

## **Reproduction of Photon Mapping**

Sept.2023 - Dec.2023

• Reproduced the 1996 Rendering Techniques paper *Global Illumination using Photon Maps* with final gathering. [Github]

## **AWARDS**

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

Sept. 2022

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

Sept. 2023

## **TECHNICAL SKILLS**

• Languages: Chinese(Native Speaker), English(TOEFL iBT 102)

• Programming Languages: C++, C, Python, C#, GLSL, Java

• Software: Blender, Pbrt-v3, Nori

• Library/Framework: PyTorch