Wenbo Ji

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#### EDUCATION

Tongji University

Shanghai, China

M.Sc - Computer Science

Sep 2021 - Present

o Supervisor: Associate Professor. Gang Wei

 $\circ$  **GPA**: 4.5/5.0

o Relevant Coursework: Pattern Recognition, Advanced Image Processing

# Nanjing Tech University

Nanjing, China

B.Sc - Information and Computing Science (Embedded Software)

Sep 2017 - June 2021

• **GPA**: 3.5/4.0

o Relevant Coursework: Numerical Analysis, Computer Graphics, Pattern Recognition

o Clarification: My major is a branch of mathematics

#### Research Interests

# 3D Computer Vision

3D Reconstruction (point cloud based), Neural Implicit Representation, Neural Rendering

#### Projects

# Point Cloud Based Reconstruction of Large-Scale Factory Scenes

April 2021 - Present

Tongji University, CAD Reserach Center (w/ assoc. prof. Gang Wei)

Shanghai, China

- Working on a pipeline for self-supervised instance segmentation and surface reconstruction of point cloud.
- Working with China Three Gorges Corporation for Digital asset management.
- Keyword: self-supervised instance segmentation, Neural implicit reconstruction

# Pose Estimation of a Noncooperative Target Based on Monocular Images

June 2022 - Present

Tongji University, CAD Reserach Center (w/ assoc. prof. Zhicheng Wang)

Shanghai, China

- o Working on estimation of the posture of non-cooperative targets in space (e.g. disabled satellites) based on monocular image sequences.
- Keyword: Object Tracking, Depth estimation, map optimization

#### Coordinate-based MLPs

May 2022

My toy project

Shanghai, China

• Reproduction of coordinate-based Networks based on Pytorch-lightning for contrasting the effects of different implicit representations.

# Selected Awards and Honors

# The First Prize Scholarship

Sep 2017 - June 2021

Nanjing Tech University

Yearly

National Encouragement Scholarship

Nanjing Tech University

Fall 2020 Nanjing, China

**Outstanding Graduate** Nanjing Tech University

Fall 2021

Nanjing, China

The TIPDM Cup Data Mining Challenge Competition - The National Third Prize Thesis: "Intelligent Diagnosis of Rectal Cancer Based on Patterns of Lymphatic Metastasis"

Summer 2019 Nanjing, China

SKILLS

# Chinese - C2

Native language

#### English - B2

Certificates: CET 6

German - B2

Certificates: Goethe B2, TestDaF

#### **Program Languages**

C++, Python

### Framework

Pytorch, CUDA, OpenGL

Blender, Git, Docker, MATLAB