Chenbo Jiang

Education

2019-Now Nanjing University of Science and Technology Zijin College,

School of Computer Science, Bachelor of Computer Science and Technology.

Degree GPA - 3.91/4, Overall 89.83/100, rank 2/114

Research

Feb 2020- NeuralSlice: Learning to Improve 3D Topology by 4D Geometry, Assistant Professor, Bo Yang, Nov 2021 The Hong Kong Polytechnic University.

- Key idea: Deform the 4D template with a neural network and slice out a 3D shape.
- We propose a novel representation with both the implicit method's topology adaptability and the explicit method's efficiency.
- We demonstrated that, in our representation, one 4D object could represent a similar 3D object-family in different slices. This can improve 3D reconstruction results.
- Our representation can represent 3D objects of different 3D topologies as different slices of one 4D object.

Feb 2021 Improve the 3D Modeling Performance of Neural ODE, Assistant Professor, Bo Yang, The Hong Kong Polytechnic University.

- We have noticed that a Neural ODE $F: \mathbb{R}^3 \to \mathbb{R}^3$ is not capable of expressing all homomorphism mappings in \mathbb{R}^3 . But a Neural ODE $F: \mathbb{R}^6 \to \mathbb{R}^6$ can represent all homomorphism mappings in \mathbb{R}^3 .
- Increased the Chamfer Distance of Neural Mesh Flow from 2.976 to 1.873.
- As a baseline in "Learning to Reconstruct 4D Objects".

Research Interests.

o 3D Deep Learning, Robot Learning, Character Animation, Geometric Deep Learning, Geometry Processing.

Scholarships

- Jan 2022 Special scholarship, Nanjing University of Science and Technology Zijin College.
 - Ranked 1/114 in School of Computer Science.
- Aug 2021 First-class scholarship, Nanjing University of Science and Technology Zijin College.
 - Ranked in the TOP 2% in School of Computer Science.
- Jan 2021 First-class scholarship, Nanjing University of Science and Technology Zijin College.
 - Ranked in the TOP 2% in School of Computer Science.
- Aug 2020 First-class scholarship, Nanjing University of Science and Technology Zijin College.
 - Ranked in the TOP 2% in School of Computer Science.
- Jan 2020 Second-class scholarship, Nanjing University of Science and Technology Zijin College.
 - Ranked in the TOP 5% in School of Computer Science.

Skills

Languages Python(A), C/C++(B), SQL(B)

Frameworks Keras, PyTorch, Tensorflow

Utilities Linux, Pip, Anaconda, Git, VsCode

Relevant Courses

Online Convolutional Neural Networks for Visual Recognition, Deep Learning.

Classroom Linear Algebra, Calculus, Discrete Mathematics, Probability Theory and Mathematical Statistics, Machine Learning, Data Mining, Data Structure, Database System, Digital Logic Circuit