Zhouyuan Chen

CONTACT INFO

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EDUCATION

New York University Sep. 2023 – Current

Master in Computer Science *New York, United States*

Zhejiang University of Technology Sep. 2019 – Jun. 2023

Bachelor in Software Engineering *Hangzhou, China*

RESEARCH EXPERIENCE

Embedded Remeshing June 2023 – Current

Advised by Daniele Panozzo and Daniel Zint *New York, United States*

- We tried to use a novel method to extract objects and iso-surfaces, making a direct simulation based on segmented volumetric data possible. I wrote the prototype and modified the idea. Later I contributed to the open source software wildmeshing-toolkit and helped implement the pipeline of our paper.

Teeth Undercut Model Generation Mar. 2022 – June 2022

Advised by Jiazhou Chen *Hangzhou, China*

- I used a self-made algorithm to reconstruct the undercut model of human teeth, automatically generating the mesh to help dentists avoid manually making the undercut model.

Teeth Model Collision Visualization and Acceleration Aug. 2021 – Jan. 2022

Advised by Jiazhou Chen *Hangzhou, China*

- This project is aimed to make a company's medical software perform more efficiently. I implemented the existing collision detection algorithms to accelerate the collision computation, to make the software faster(3 minutes to less than 200ms per computation). I also added some other features, such as visualizing the minimum distance or the embedding distance between two teeth.

WORK EXPERIENCE AND ACTIVITIES

Geometric Modeling(CSCI-GA.3033-018) Spring 2024

Teaching Assistant at the New York University *New York, United States*

- This is a graduate-level course covering topics on surface reconstruction, mesh smoothing, optimization, mesh parametrization, mesh deformation, editing, skeletal animation, skinning, fabrication-aware modeling, etc.

Intro to Computer Science(CSCI-UA 101-10) Spring 2024

Grader at the New York University *New York, United States*

- This is an undergraduate-level course that teaches students how to design algorithms to solve problems and how to translate these algorithms into working computer programs.

SKILLS AND INTERESTS

Programming Languages: C/C++, Python, Java, SQL

Libraries : Eigen, EasyX, Libigl, WildMeshing

Languages: Chinese (native), English (fluent)

Research Interests: Computer Graphics, Geometry Processing, Physically-Based Simulation