

# Zhouyuan Chen

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## Education

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|----------------------|---|
| Sep. 2023 – Current  | New York University, New York, NY<br>Master of Science(M.Sc.), Computer Science<br>GPA:3.677/4                            |
| Sep. 2019 – May 2023 | Zhejiang University of Technology, Hangzhou, China<br>Bachelor of Engineering(B.E.), Software Engineering<br>GPA:88.6/100 |

## Research Interests

Computer Graphics, Geometry Processing, Numerical Simulation

## Research Experience

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| Jun. 2023 – Current  | New York University, New York, NY<br>Research Assistant at Geometric Computing Lab<br>Advisor: <a href="#">Daniele Panozzo</a> <ul style="list-style-type: none"><li>• Hybrid Element Shell(ongoing project): Developing an algorithm for building prism-based or prism-dominant shells.</li><li>• Image Simulation: Designed a pipeline to automate biomechanism simulations and implemented a plugin to streamline workflows.</li><li>• Topological Offsets: Designed a robust offsets generation algorithm and contributed to the Wildmeshing Toolkit C++ library.</li></ul> |
| Aug. 2021 – May 2023 | Zhejiang University of Technology, Hangzhou, China<br>Research Assistant at Institute of Digital Media Technology<br>Advisor: <a href="#">Jiazhou Chen</a> <ul style="list-style-type: none"><li>• Undercut Model Generation: Designed and implemented an algorithm to reconstruct the undercut model of human teeth.</li><li>• Collision Detection and Visualization: Designed and implemented algorithms to visualize the collision between different objects.</li></ul>  |

## Publications & Preprints

### Submitted for Publication

- W1. Zint, D., **Zhouyuan Chen**, Zhu, Y., Zorin, D., Schneider, T. & Panozzo, D. *Topological Offsets* 2024. arXiv: [2407.07725](https://arxiv.org/abs/2407.07725) [cs.CG]. <https://arxiv.org/abs/2407.07725>.

## Teaching Experience

### New York University

2024            Grader, Intro to Computer Science(CSCI-UA 101-10)  
2024            Teaching Assistant, Geometric Modeling(CSCI-GA.3033-018)

## Tools & Software

### 3D Slicer: Image Simulator

Software that generates simulation-ready mesh from medial images with boundary conditions.

### Hansfive Company Software: Virtual Gums

Software that assists dental staff in constructing tooth models.

## Awards & Honors

2020-2022    Academic Excellence Scholarship, ZJUT

## Technical Skills

Programming Language: C++, C, Python, Java, MATLAB  
Languages: Chinese (native), English (fluent)

## References

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