Jiayu Wu

linkwu@zju.edu.cn
wjy2249.github.io/linkwu.github.io

Research Interests

Geometric Modeling　**Computer-aided Design**　**Computer Graphics**　**Computational Geometry**　**Parallel Computing**

Education

2023–present	**M.S.** in Artificial Intelligence, Zhejiang University, Weighted Average(91.8/100) Rank(NA*)
2019–2023	**B.Sc.** in Software Engineering, Dalian University of Technology, Weighted Average(93.06/100) Rank(2/73) **(Top%3)**

Research Experience

2023–present	Graduate Student, State Key Laboratory of CAD&CG, Zhejiang University, (Advisor: Prof. Qiang Zou) Research Topic 1: **High-performance B-spline modeling on GPU (Main Focus)** Research Topic 2: **Using generative models for curve and surface modeling**

Selected Publications

Journal Articles

J1. **Jiayu Wu**, Feng, Z. & Zou, Q. Matrix representation and GPU-optimized parallel B-spline computing. *Computer-Aided Design (presented in SPM2025)* **189,** 103948 (2025).

J2. Zou, Q., Zhu, L., **Jiayu Wu** & Yang, Z. SplineGen: Approximating unorganized points through generative AI. *Computer-Aided Design* **178,** 103809 (2025).

J3. Zhao, Y., Zou, Q., Luo, G., **Jiayu Wu**, Chen, S., Gao, D., Xuan, M. & Wang, F. TPMS2STEP: Error-Controlled and C2 Continuity-Preserving Translation of TPMS Models to STEP Files Based on Constrained-PIA. *Computer-Aided Design* **173,** 103726 (2024).

Working papers

W1. **Jiayu Wu** & Zou, Q. *Efficient B-spline surface intersection on GPUs* Manuscript in preparation. 2026.

---

*Due to different course selections, the College of Computer Science where I am located does not provide grade rankings for graduate students. In the academic year's class average statistics, I was 1/33 in my administrative class.

Presentations

Talks

T1. **Jiayu Wu**. *High performance geometric computing* SPM 2025: Symposium on Solid and Physical Modeling (Hangzhou, China). Oct. 2025.

Awards & Honors

Awards and Achievements

2020, 2021	**Gold Award**, Liaoning Provincial Programming Contest.
2020	**Bronze Award**, CCPC Undergraduate Programming Competition (Northeast China).
2020	**Silver Award**, National College Student Algorithm Programming and Design Contest.
2021	**Winning Prize**, 2021 ACM-ICPC Asia Regional Finals (ICPC EC-final).
2021	**Individual Second Prize**, CCCC National Group Programming Ladder Competition.

Scholarship

2020, 2021	**First-class scholarship for study**. Dalian University of Technology.
2020–2022	**Science and Technology Innovation Scholarship**. Dalian University of Technology.
2020	**National Scholarship (Undergraduate Level) (Top%1)**. Ministry of Education of the People's Republic of China.
2024, 2025	**First-class Scholarship for Academic Excellence**. Zhejiang University.
2025	**National Scholarship (Graduate Level) (Top%1)**. Ministry of Education of the People's Republic of China.

Honors

2023	**Outstanding Graduate**. Dalian University of Technology.
2024	**Academic Innovation Ability Single Honor**. Zhejiang University.
2025	**Outstanding Postgraduate**. Zhejiang University.
2025	**Five-Good Postgraduate**. Zhejiang University.

SKills

Lanugage	**Chinese** (Native), **English** (TOEFL, 104), **Japanese** (N2, 132)
Programming	**C/C++**, **CUDA**, **Python**

Last updated: November 26, 2025