

Jieyin Yang

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EDUCATION

University of Chinese Academy of Sciences

Aug. 2021 – present

Ph.D. in Applied Mathematics

Advisor: Prof. Xiaohong Jia

GPA: 3.91/4.0

Columbia University

Jan. 2020 – Jun. 2020

Visiting Student in Engineering and Applied Sciences

University of Chinese Academy of Sciences

Aug. 2017 – Jun. 2021

B.S. in Mathematics and Applied Mathematics

GPA: 3.95/4.0, Rank: 2/52

RESEARCH INTERESTS

Computer Graphics, Computer Aided Design, Computational Algebraic Geometry

PUBLICATIONS

Overlap Region Extraction of Two NURBS Surfaces.

Jieyin Yang, Xiaohong Jia

ACM Transactions on Graphics (Proc. SIGGRAPH Asia 2025)

Boolean Operation for CAD Models Using a Hybrid Representation.

Yingyu Yang, Xiaohong Jia, Bolun Wang, Jieyin Yang, Shiqing Xin, Dong-Ming Yan

ACM Transactions on Graphics (Proc. SIGGRAPH 2025)

Computing the intersection of two ellipsoids based on a fast algebraic topology determination strategy.

Xiao Chu, Kai Li, Xiaohong Jia, Jieyin Yang, Jiarui Kang

Computer Aided Geometric Design (Proc. GMP 2025)

Accurate and robust registration of low overlapping point clouds.

Jieyin Yang, Mingyang Zhao, Yingrui Wu, Xiaohong Jia

Computer & Graphics, 2024

Topology Guaranteed B-Spline Surface-Surface Intersection.

Jieyin Yang, Xiaohong Jia, Dong-Ming Yan

ACM Transactions on Graphics (Proc. SIGGRAPH Asia 2023)

A Robust and Efficient Intersection Algorithm for NURBS Surfaces: Handling Small Loops and Tangent Intersections.

Jieyin Yang, Xiaohong Jia

ACM Transactions on Graphics (under revision)

HONORS AND AWARDS

2025	CSIAM Applied Mathematics Achievement Award: Surface Intersection Method and Software for Geometry Engine
2024	Doctoral National Scholarship
2023	Hua Luogeng Scholarship of AMSS
2021-25	Merit Student of CAS
2020	Undergraduate National Scholarship

SKILLS

Programming	C++, Matlab, Maple
Math	Computational geometry, Symbolic computation, Linear algebra, Numerical optimization