



赵轩艺

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## 教育背景

2012.09–2017.06, 大连理工大学, 理学博士

2008.09–2012.06, 大连理工大学, 理学学士

## 研究领域

计算数学, 计算几何, 计算机辅助几何设计

## 代表性成果

- **Xuanyi Zhao**, Ying Wang, Jinggai Li, Chungang Zhu\*. Algorithms for computing the approximation of offsets of toric Bézier curves, *Computational and Applied Mathematics*, 41(2022), 221. (SCI,Q1)
- **Xuanyi Zhao**, Jinggai Li, Ying Wang, Chungang Zhu\*. Improved algorithms for determining the injectivity of 2D and 3D rational Bézier curves, *Electronic Research Archive*, 30(5) (2022), 1799-1812. (SCI,Q1)
- **Xuanyi Zhao**, Jinggai Li, Shiqi He, Chungang Zhu\*. Geometric conditions for injectivity of 3D Bezier volumes, *AIMS Mathematics*, 6(11) (2021) 11974-11988. (SCI,Q1)
- Lei Zhang, Yanzhang Wang, **Xuanyi Zhao**\*. A new emergency decision support methodology based on multi-source knowledge in 2-tuple linguistic model, *Knowledge-Based Systems*, 144 (2018) 77-87. (SCI,Q1)
- Han Wang, Chungang Zhu\*, **Xuanyi Zhao**. The number of regular control surfaces of toric patch, *Journal of Computational and Applied Mathematics*, 329 (2018) 280-293. (SCI,Q1)
- **Xuanyi Zhao**, Chungang Zhu\*, Han Wang. Geometric conditions of non-self-intersecting NURBS surfaces, *Applied Mathematics and Computation*, 310(2017),89-96. (SCI,Q1)
- **Xuanyi Zhao**, Chungang Zhu\*. Injectivity of NURBS curves, *Journal of Computational and Applied Mathematics*, 302,(2016),129-138. (SCI,Q1)
- **Xuanyi Zhao**, Chungang Zhu\*. Injectivity conditions of rational

### 代表性项目

### 荣誉奖励

- Bézier surfaces, *Computers & Graphics*, 51(2015), 17-25. (SCI,Q2)
- Chungang Zhu\*, Xuanyi Zhao. Self-intersections of rational Bézier curves, *Graphical Models*, 76(5) (2014), 312-320. (SCI,Q2)
  - 有理 Bézier 曲线的自交点, *计算机辅助设计与图形学学报*, 25(5), 738-744, 2013. (EI)
  - NURBS 曲线的无自交近似等距曲线计算, *计算机辅助设计与图形学学报*.(录用待发表) (EI)
- (1) 国家自然科学基金青年科学基金项目, 11801053, Toric 曲面单值性与 NURBS 曲面近似 offset 的研究, 2019.01-2021.12, 主持.
- (2) 中央高校基本科研业务费青年教师科技创新项目, 3132019180, Bézier 多胞体单值条件的研究, 2019.01-2019.12, 主持.
- (3) 中央高校基本科研业务费青年教师科技创新项目, 3132018221, 参数曲面单值性的研究与应用, 2018.01-2018.12, 主持.
- (1) 2020 年大连海事大学理论课堂教学比赛 三等奖
- (2) 2017 年辽宁省自然科学学术成果奖 学术论文类三等奖

