Rui Xu

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SUMMARY

I am a second-year master student at the Interdisciplinary Research Center (IRC) of Shandong University, under the supervision of **Prof. Changhe Tu** and **Prof. Shiqing Xin**. My research interest is computer graphics, geometry, and reconstruction. I'm actively seeking Ph.D. position starting in the Fall of 2024.

EDUCATION

•**Shandong University**   *2021 - 2024 (Expected)*
M.Eng in Computer Science   Shandong, China

•**Shandong University**   *2017 - 2021*
B.Eng in Computer Science   Shandong, China

PUBLICATIONS

•**Globally Consistent Normal Orientation for Point Clouds by Regularizing the Winding-Number Field**

Rui Xu, *Zhiyang Dou, Ningna Wang, Shiqing Xin, Shuangmin Chen, Mingyan Jiang, Xiaohu Guo, Wenping Wang, Changhe Tu*
 – ACM Transactions on Graphics (SIGGRAPH 2023) **[Project Page] [Code]**
 – ACM SIGGRAPH 2023 Technical Papers **Best Paper Award**

•**RFEPS: Reconstructing Feature-line Equipped Polygonal Surface**

Rui Xu, *Zixiong Wang, Zhiyang Dou, Chen Zong, Shiqing Xin, Mingyan Jiang, Tao Ju, Changhe Tu*
 – ACM Transactions on Graphics (SIGGRAPH Asia 2022) **[Project Page] [Code]**

•**SurfaceVoronoi: Efficiently Computing Voronoi Diagrams over Mesh Surfaces with Arbitrary Distance Solvers**

Shiqing Xin, Pengfei Wang, **Rui Xu**, Dongming Yan, Shuangmin Chen, Wenping Wang, Caiming Zhang, Changhe Tu*
 – ACM Transactions on Graphics (SIGGRAPH Asia 2022) **[Code]**

•**QuickCSGModeling: Quick CSG Operations Based on Fusing Signed Distance Fields for VR Modeling**

Shuangmin Chen, **Rui Xu**, Jian Xu, Shiqing Xin, Changhe Tu, Chenglei Yang, Lin Lu*
 – ACM Transactions on Multimedia Computing Communications and Applications (ToMM 2023)

•**Mesh-MLP: An all-MLP Architecture for Mesh Classification and Semantic Segmentation**

*Qiujie Dong, **Rui Xu**, Xiaoran Gong, Zixiong Wang, Shuangmin Chen, Shiqing Xin, Changhe Tu*
 – arXiv 2023

•**Coverage Axis: Inner Point Selection for 3D Shape Skeletonization**

*Zhiyang Dou, Cheng Lin, **Rui Xu**, Lei Yang, Shiqing Xin, Taku Komura, Wenping Wang*
 – Computer Graphics Forum (Eurographics 2022) **[Project Page] [Code]**

•**EasyVRModeling: Easily Create 3D Models by an Immersive VR System**

*Zhiying Fu, **Rui Xu**, Shiqing Xin, Shuangmin Chen, Changhe Tu, Chenglei Yang, Lin Lu*
 – ACM SIGGRAPH Symposium on Interactive 3D Graphics and Games (i3D 2022)

•**Top-Down Shape Abstraction Based on Greedy Pole Selection**

Zhiyang Dou, Shiqing Xin, **Rui Xu**, Jian Xu, Yuanfeng Zhou, Shuangmin Chen, Wenping Wang, Xiuyang Zhao, Changhe Tu*
 – IEEE Transactions on Visualization and Computer Graphics (TVCG 2020)

EXPERIENCE

•**Tencent Intern**   *Sep 2022 - Dec 2022*
Research in Geometry Modeling.   Shenzhen, China

•**Alibaba Intern**   *May 2020 - Sep 2020*
Algorithm Engineer for Digital Twins with Unreal Development.   Hangzhou, China

TECHNICAL SKILLS AND INTERESTS

Languages: Chinese (Native), English (Fluent)
Programming Skills: C/C++, Matlab, Latex, Python
Hobbies: Table tennis and badminton