

# Zhiyang (Frank) Dou

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**Bio.** I am a third-year Ph.D. candidate in CG and CV Group at the University of Hong Kong, supervised by [Prof. Wenping Wang](#) and [Prof. Taku Komura](#). I received my B. Eng. degree with honors at Shandong University. My undergraduate research advisor is [Prof. Shiqing Xin](#).

**Research interests** : Character Animation, Geometric Modeling and Processing, Computer Graphics.

## Education

Aug 2020 – Present

Ph.D. in CG and CV, Computer Science, *The University of Hong Kong*.

Sep 2016 – June 2020

Computer Science Honours, Computer Science (Elite Program), *Shandong University*.

## Research Work

- > **E-ASE : Conditional Adversarial Skill Embeddings for Elite Physics-based Characters**  
Zhiyang Dou, Xuelin Chen, Qingnan Fan, Taku Komura, Wenping Wang.  
Under Review at SIGGRAPH AISA 2023.
- > **Globally Consistent Normal Orientation for Point Clouds by Regularizing the Winding-Number Field**  
Rui Xu, Zhiyang Dou, Ningna Wang, Shiqing Xin, Xiaohu Guo, Wenping Wang.  
ACM Transactions on Graphics. SIGGRAPH 2023.  
[\[Project Page\]](#)[\[Code\]](#)
- > **TORÉ : Token Reduction for Efficient Human Mesh Recovery with Transformer**  
Zhiyang Dou\*, Qingxuan Wu\*, Cheng Lin, Zeyu Cao, Qiangqiang Wu, Weilin Wan, Taku Komura, Wenping Wang.  
Under Review at ICCV 2023.  
[\[Project Page\]](#)[\[Paper\]](#)
- > **RFEPS : Reconstructing a Feature-line Equipped Polygonal Surface from Unoriented Point Cloud**  
Rui Xu, Zixiong Wang, Zhiyang Dou, Chen Zong, Shiqing Xin, Mingyan Jiang, Changhe Tu.  
ACM Transactions on Graphics. SIGGRAPH Asia 2022.  
[\[Project Page\]](#)[\[Code\]](#)
- > **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.  
[\[Project Page\]](#)[\[Code\]](#)
- > **Student close contact behavior and COVID-19 transmission in China's classrooms**  
Yong Guo\*, Zhiyang Dou\*, Nan Zhang, Xiyue Liu, Boni Su, Yuguo Li, Yiping Zhang.  
PNAS Nexus, 2023.
- > **Close Contact Behaviors of University and School Students in 10 Typical Indoor Environments**  
Nan Zhang, Li Liu, Zhiyang Dou, Xiyue Liu, Xueze Yang, Yong Guo, Silan Gu, Yuguo Li, Hua Qian, Jianjian Wei.  
Accepted to ACS Environmental Science & Technology, IF=11.4, 2022.
- > **Real Close Contact Behavior-based COVID-19 Transmission and Interventions in Subway**  
Xiyue Liu\*, Zhiyang Dou\*, Lei Wang, Boni Su, Tianyi Jin, Yong Guo, Jianjian Wei, Nan Zhang.  
Journal of Hazardous Materials (JHM), IF=14.2, 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), 2021.

\*Equal contribution

## Scholarships

- > Oct 2020 Postgraduate Scholarship.
- > Oct 2019 National Scholarship (0.2%).
- > Oct 2018 National Scholarship (0.2%).
- > Dec 2018 Presidential Scholarship (top 30 at the University).

## Patents & Competitions

- > **[Patent]** Method, Device and Process for Hand-to-Surface Contact Detection, 2023, Under Review.
- > **[Patent]** Method, Device and Process for Social Distancing, 2020, Patent CN202110334126.
- > Meritorious Winner, International Mathematical Modeling Contest : MCM, 2019.

- > Meritorious Winner, [International Mathematical Modeling Contest](#) : ICM, 2018.
- > National First Prize (1%), [National Collegiate Mathematical Modeling Contest](#), 2019.
- > National First Prize, Best Paper (8/38573), [National Collegiate Mathematical Modeling Contest](#), 2018.

## Services & Internships

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- > 2022 - Now Research Intern, [Tencent AI Lab](#).
- > 2021-2022 Junior Resident Tutor at [Graduate House](#).
- > 2020-2022 Teaching Assistant of COMP3362-22 Hands-on AI & COMP2120 Computer Organization.
- > 2019-2020 Teaching Assistant of SD01331421 Machine Learning.
- > 2018-2019 Co-founder of Open Interest Lab (IPLab) at SDU (By 2022, we have more than 120 members).
- > 2018-2019 Research Intern at [Peking University Computer Center](#). Mentor : [Rongbin Ouyang](#).