Zhiyang (Frank) **Dou**

🔗 frank-zy-dou.github.io
✉ zhiyang0@connect.hku.hk
📍 Chow Yei Ching Bldg 416, HKU, Pokfulam Rd, Hong Kong

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.
> To be submitted to **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.
> Conditional Accepted to **SIGGRAPH 2023**.
> [Project Page][Code]

> TORE : 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]

> 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 & Technolog, IF=11.4, 2022**.

> Student close contact behavior and COVID-19 transmission in China's classrooms
> Yong Guo*, **Zhiyang Dou***, Nan Zhang, Xiyue Liu, Boni Su, Yuguo Li, Yinping Zhang.
> Conditional Accepted to **PNAS Nexus, 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

- > **2022-Present** Research Intern at Tencent AI Lab.
- > **2021-2022** Graduate House Junior Resident Tutor.
- > **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*.