

Hongrui Cai

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Email: hrcai@mail.ustc.edu.cn **GitHub:** github.com/RainbowRui

Research interests Computer Vision & Graphics: 3D geometry processing, point cloud processing, image and video generation.

Education **University of Science and Technology of China** Hefei, China
Ph.D. in 3D Vision Sep. 2021 – Present
Mentors: Prof. Juyong Zhang.

University of Science and Technology of China Hefei, China
M.S. in Data Science Sep. 2019 – Jul. 2021
Mentors: Prof. Juyong Zhang. GPA: **3.85/4.3**

South China University of Technology Guangzhou, China
B.S. in Mathematics and Applied Mathematics Sep. 2015 – Jun. 2019
Ranking: **1/46**. GPA: **92.15/100**

Papers Huang, X., **Cai, H.**, Liang, D., Zhang, J., Jia, J., (2021). CariPainter: Sketch Guided Interactive Caricature Generation. (Under Review).

Feng, W., **Cai, H.**, Hou, J., Deng, B., Zhang, J., (2021). Differentiable Deformation Graph based Neural Non-rigid Registration. (Under Review).

Cai, H., Guo, Y. Peng, Z., Zhang, J., (2021). Landmark Detection and 3D Face Reconstruction for Caricature using a Nonlinear Parametric Model. *Graphical Models (GMOD)*.

Feng, W., Zhang, J., **Cai, H.**, Xu, H., Hou, J., Bao, H., (2021). Recurrent Multi-view Alignment Network for Unsupervised Surface Registration. In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*.

Guo, Y., Zhang, J., Chen, Y., **Cai, H.**, Huang, Z., Deng, B., (2021). Real-Time Face View Correction for Front-Facing Cameras. *Computational Visual Media (CVM)*.

Projects **Real-Time Face View Correction for Front-Facing Cameras**
Horizontal project Sep. 2019 – Oct. 2020
Propose a fully automatic face view correction system based on a single RGB camera to solve video calling problems such as "upward nose" and "big face" caused by disparity between camera location and face orientation.

Honors	Excellent Undergraduate Student, by SCUT	2019
	Excellent Undergraduate Thesis Award, by SCUT	2019
Academic Talks	Oral presentation in CVM 2021	Apr. 2021