

# Hongrui Cai

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**Email:** hrcai@mail.ustc.edu.cn    **Phone:** (86) 152-0755-5839    **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  
M.S. in Data Science    Sep. 2019 – Present  
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: 3.84/4.0

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

**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 Graduates of SCUT    2019  
Excellent Undergraduate Thesis Award of SCUT    2019

**Academic Talks**    Oral presentation in CVM 2021    Apr. 2021