# KEYU CHEN

University of Science and Technology of China, Hefei Anhui 230027 (+86) 18856017331  $\diamond$  chern9511@gmail.com  $\diamond$  https://kychern.github.io

#### **EDUCATION**

## University of Science and Technology of China, PRC

Sep. 2018 - June 2021 (expected)

Master in Computational Science and Applied Mathematics

Department of Mathematics

Supervised by Prof. Juyong Zhang

## Nanyang Technological University, Singapore

Aug. 2019 - Aug. 2020 (expected)

Research Intern at Multimedia and Interactive Computing Lab (MICL)

School of Computer Science and Engineering

Co-supervised by Prof. Jianmin Zheng, Prof. Juyong Zhang and Prof. Jianfei Cai

## University of Science and Technology of China, PRC

Sep. 2014 - June 2018

Bachelor of Computational Science and Applied Mathematics

Department of Mathematics

#### RESEARCH INTERESTS

Intersection area of computer vision and graphics including 3D face animation, representation and expression analysis.

#### **PUBLICATION**

#### Disentangled Representation Learning For 3D Face Shape

Zi-Hang Jiang, Qianyi Wu, **Keyu Chen** and Juyong Zhang

IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2019.

#### Facial Expression Retargeting from Human to Avatar Made Easy

Juyong Zhang, **Keyu Chen** and Jianmin Zheng

IEEE Transaction of Visualization and Computer Graphics (Under minor review)

#### CariAnim: Caricature Animation Driven by Facial Expression Sequence

Keyu Chen, Juyong Zhang, Jianfei Cai, Jianmin Zheng

Under Review

## **PROJECTS**

#### **Extending Generalized Barycentric Coordinates**

May 2018 - Aug. 2018

GSoC 2018 Project with CGAL Organization

The project aimed to extend the existed Generalized Barycentric Coordinates package in CGAL with another two powerful coordinates, Harmonic Coordinates and Maximum Entropy Coordinates. This project was mentored by Dr. Dmitry Anisimov and obtained all pass evaluations in Google Summer of Code 2018.

#### Disentangled 3D Face Representation Learning

Sep. 2018 - Nov. 2018

Published in CVPR 2019

The project was motivated by nonlinear encoder-decoder technology in building disentangled 3D face shape attribute domains. Our paper is accepted by CVPR 2019 conference as *Disentangled Representation Learning for 3D Face Shape*.

## 3D Character Expression Animation

Jan. 2019 - Aug. 2019

Under Review.

We designed an easy-to-use approach for building 3D character animation system. Our contribution is that we novelly considered human perception factor in facial expression area. The full paper is undergoing review process.

#### 3D-based Caricature Animation

Aug. 2019 - Nov. 2019

Under Review.

This system allows simple input as low-dimentional expression parameters and can output high-quality caricature animation series. The underlying algorithms are implemented with 3d geometric modelling and deep learning techniques. The full paper is undergoing review process.

#### WORK EXPERIENCE

## Dilusense Tech., Hefei

Feb 2018 - May 2018

Research Intern

· Responsible for building real-time rgbd facial animation system.

## DeepGlint Tech., Hefei

June 2017 - July 2017

 $Software\ Developer$ 

· Participated in building an automatic motor vehicles license detection system

## SKILLS/ LANGUAGES

**Programming:** C++, Python, Generic Programming

Software: Matlab, Latex

**English:** TOEFL 106 (R:29 L:29 S:24 W:24)