

Zhouyingcheng Liao

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RESEARCH INTERESTS	Computer vision; Computer graphics; 3D human modelling and animation(body, face and garment); Markerless motion capture	
EDUCATION	<i>Master of Science</i>	10.2020 - Present
	Saarland University	Saarbrücken, Germany
	Major: Computer Science	
	<i>Bachelor of Science</i>	09.2015 - 06.2020
EXPERIENCE	Shanghai Jiao Tong University	Shanghai, China
	Major: Information Security	
	<i>Research Assistance</i>	11.2020 - Present
	Max Planck Institute for Informatics	Saarbrücken, Germany
	Supervisor: Gerard Pons-Moll	
	<i>Research Intern</i>	03.2020 - 09.2020
	miHoYo	Shanghai, China
	Mentor: Jun Xing	
	<ul style="list-style-type: none">• We designed a CycleGAN-based model to transfer the facial expression of the human actor to 3D anime avatars.• We designed a complete pipeline to record all possible facial expressions of a human actor.• We realized auto facial rigging using an optimization based method, which is guided by facial markers and expression transfer.	
	<i>Research Assistance</i>	03.2019 - 10.2019
	Max Planck Institute for Informatics	Saarbrücken, Germany
	Supervisor: Gerard Pons-Moll	
	<ul style="list-style-type: none">• We created a 3D garment dataset, which contains a huge variety of human poses, shapes and garment styles.• We proposed a neural model which learns to predict realistic garment deformation.	
	<i>Research Intern</i>	07.2018 - 02.2019
	SenseTime	Beijing, China
	Mentor: Wentao Liu	
	<ul style="list-style-type: none">• We extended single image 3D human recovery methods to support video inference with little motion jittery.• We improved the accuracy and training efficiency of existing single image 3D human recovery methods.	

Research Assistance
Shanghai Jiao Tong University
Supervisor: [Bingbing Ni](#)

06.2017 - 01.2018
Shanghai, China

- We proposed a single convolutional network to jointly achieve face detection and recognition.
- We proposed a live face verification method, which detects fake faces by detecting local homography property of recorded face videos.

PUBLICATION **TailorNet: Predicting Clothing in 3D as a Function of Human Pose, Shape and Garment Style** [\[pdf\]](#) [\[project website\]](#)
CVPR 2020 (Oral)

Chaitanya Patel*, **Zhouyingcheng Liao*** and Gerard Pons-Moll (*co-first author)

- We present TailorNet, a neural model which predicts clothing deformation in 3D as a function of three factors: pose, shape and style (garment geometry), while retaining wrinkle data.

Live Face Verification with Multiple Instantialized Local Homographic Parameterization [\[pdf\]](#)
IJCAI 2018

Chen Lin, **Zhouyingcheng Liao**, Peng Zhou, Jianguo Hu and Bingbing Ni

- A model which could classify live facial sequence and recorded facial sequence is proposed. Due to local homography property of recorded facial sequence, a spatial transformation network is embedded in the model.

Uniface: A Unified Network for Face Detection and Recognition [\[pdf\]](#)
ICPR 2018

Zhouyingcheng Liao, Peng Zhou, Tailong Wu and Bingbing Ni

- A bottom-up/top-down structure is adopted to combine face detection and recognition and an attention module is adopted to replace face alignment. A single-network model, i.e. Uniface is proposed which achieves the accuracy of 99.0% on LFW test set.

SKILLS

Advanced

Python, PyTorch, TensorFlow, C++

Basic

CUDA, Blender, Latex, Matlab