

# Di Chang

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## EDUCATION

### University of Southern California

*PhD in Computer Science* Advisor: Prof. Mohammad Soleymani

Los Angeles, California, USA

Aug. 2022 – May. 2026(Anticipated)

### Technical University of Munich

*Bachelor of Science in Informatics* Advisor: Prof. Matthias Nießner

Munich, Bavaria, Germany

Sep. 2021 – Jul. 2022

### Dalian University of Technology

*Bachelor of Engineering in Electronic Information Engineering*

Dalian, Liaoning, China

Sep.2018 – Jun. 2021

## RESEARCH AREA

Video Generation   Image Editing   Human Understanding   Virtual Human   3D Geometry

## PREPRINTS

### Learning-based Multi-View Stereo: A Survey

In Submission

Fangjihua Wang<sup>\*†</sup>, Qingtian Zhu<sup>\*</sup>, **Di Chang**<sup>\*</sup>, Quankai Gao, Junlin Han,  
Tong Zhang, Richard Hartley, Marc Pollefeys

2024

(\* denotes equal contribution   † denotes project lead)

### MagicPose4D: Crafting Articulated Models with Appearance and Motion Control

ArXiv

**Di Chang**<sup>\*</sup>, Hao Zhang<sup>\*</sup>, Fang Li, Mohammad Soleymani<sup>†</sup>, Narendra Ahuja<sup>†</sup>

2024

(\* denotes equal contribution   † denotes equal advise)

## PUBLICATIONS

### DIM: Dyadic Interaction Modeling for Social Behavior Generation

ECCV

**Di Chang**<sup>\*</sup>, Minh Tran<sup>\*</sup>, Maksim Siniukov, Mohammad Soleymani

2024

(\* denotes equal contribution)

### MagicPose: Realistic Human Poses and Facial Expressions Retargeting with Identity-aware DiffusionICML

**Di Chang**, Yichun Shi, Quankai Gao, Jessica Fu, Hongyi Xu, Guoxian Song, Qing Yan, Yizhe Zhu,  
Xiao Yang, Mohammad Soleymani

2024

### DiffPortrait3D: Controllable Diffusion for Zero-Shot Portrait View Synthesis

CVPR(Highlight)

Yuming Gu, Xie You, Hongyi Xu, Guoxian Song, Yichun Shi, **Di Chang**, Jing Yang, Linjie Luo

2024

### LibreFace: An Open-Source Toolkit for Deep Facial Expression Analysis

WACV

**Di Chang**, Yufeng Yin, Zongjian Li, Minh Tran, Mohammad Soleymani

2024

### FG-Net: Facial Action Unit Detection with Generalizable Pyramidal Features

WACV

Yufeng Yin, **Di Chang**, Guoxian Song, Shen Sang, Tiancheng Zhi, Jing Liu, Linjie Luo, Mohammad Soleymani

2024

### RC-MVSNet: Unsupervised Multi-View Stereo with Neural Rendering

ECCV

**Di Chang**, Aljaž Božič, Tong Zhang, Qingsong Yan, Yingcong Chen, Sabine Süssstrunk, Matthias Nießner

2022

### Generalized Binary Search Network for Highly-Efficient Multi-View Stereo

CVPR

Zhenxing Mi, **Di Chang**, Dan Xu

2022

## EXPERIENCE

### Research Scientist Intern

May. 2024 – Aug. 2024

Digital Human&Avatar, Intelligent Creation Lab, Tiktok

Mentor: Dr. Hongyi Xu, Dr. Linjie Luo

- Researching on Diffusion Models, Dynamic Video Generation

### Research Scientist Intern (Part-Time)

Aug. 2023 – Nov. 2023

Image&Video Generation, Intelligent Creation Lab, Tiktok

Mentor: Dr. Yichun Shi, Dr. Xiao Yang

- Researching on Diffusion Models, Motion Transfer

### Research Scientist Intern

May. 2023 – Aug. 2023

Image&Video Generation, Intelligent Creation Lab, Tiktok

Mentor: Dr. Yichun Shi, Dr. Xiao Yang

- Researching on Diffusion Models, Image editing

## Summer@EPFL Program

Jun. 2022 – Aug. 2022

*Funded by IVRL, École Polytechnique Fédérale de Lausanne Mentor: Professor Sabine Süssstrunk and Dr. Tong Zhang*

- Researching on 3D Vision, specifically Video Synthesis with Diffusion Models

## Guided Research

Mar. 2021 – Jun. 2022

*3D AI Group, TUM*

*Mentor: Professor Angela Dai*

- Researched on 3D Vision, specifically Single-View Category-level NeRF

## Guided Research

Sep. 2021 – Mar. 2022

*Visual Computing and 3D AI Group, TUM*

*Mentor: Professor Matthias Niessner and M.Sc Aljaž Božič*

- Researched on 3D Vision, specifically Unsupervised Multi-View Geometry

## Undergraduate Research Intern

Mar. 2021 – Sep. 2021

*Multimedia Lab, The Hong Kong University of Science and Technology*

*Mentor: Professor Dan Xu*

- Researched on 3D Vision, specifically Multi-View Stereo

## ACADEMIC SERVICE

**USC Viterbi CURVE 2023 Fall**

PhD Mentor

**USC Viterbi CURVE 2024 Spring**

PhD Mentor

**FG 2024**

Conference Reviewer

**CVPR 2024**

Conference Reviewer

**ECCV 2024**

Conference Reviewer

**ACII 2024**

Conference Reviewer

**ECCV 2024**

Conference Reviewer

**NeurIPS 2024**

Conference Reviewer

## SUPERVISED STUDENTS

**Hongkun Gong**

Undergraduate at USC

*Direct Research*

*2024 Spring*

**Jessica Fu**

Undergraduate at USC

*CURVE Fellowship*

*2023 Fall, 2024 Spring*

**Kevin Hopkins**

Master student at USC

*Direct Research*

*2023 Fall, 2024 Spring*

## TEACHING

**CSCI 535 Multimodal Probabilistic Learning of Human Communication**

USC

*Teaching Assistant*

*2024 Spring*

**CSCI 103L Introduction to Programming**

USC

*Teaching Assistant*

*2022 Fall*