

Kaifeng Zhang

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EDUCATION

Tsinghua University

Sep 2019 – Jun 2023 (Expected)

B.E. in Computer Science, Institute for Interdisciplinary Information Sciences

GPA: 3.92/4.00

- **Visiting Student Intern** at University of California, San Diego from Feb 2022 to Jul 2022

RESEARCH EXPERIENCE

University of California, San Diego

Feb 2022 – Dec 2022

Undergraduate Research Assistant

Advisor: Professor Xiaolong Wang

- **Research focus:** self-supervised learning of 3D representations from videos. Worked on the task of self-supervised category-level 6D pose estimation from in-the-wild images. Results in submission to ICLR 2023. Currently also working on utilizing diffusion models for novel view synthesis.

Tsinghua Vision and Robotics Lab

Jun 2021 – Jan 2022

Undergraduate Research Assistant

Advisor: Professor Yang Gao

- **Research focus:** contrastive learning, self-supervised learning of visual correspondences. Worked on leveraging visual correspondence for label propagation and video object segmentation. Results published at ECCV 2022.

PUBLICATIONS

Conference Publications

Self-Supervised Geometric Correspondence for Category-Level 6D Object Pose Estimation in the Wild

Kaifeng Zhang, Yang Fu, Shubhankar Borse, Hong Cai, Fatih Porikli, Xiaolong Wang

in International Conference on Learning Representations (ICLR), 2023.

<https://arxiv.org/abs/2210.07199> ; <https://kywind.github.io/self-pose>

Semantic-Aware Fine-Grained Correspondence

Yingdong Hu, Renhao Wang, Kaifeng Zhang, Yang Gao

in European Conference on Computer Vision (ECCV), 2022. (**Oral presentation**)

<https://arxiv.org/abs/2207.10456>

AWARDS & HONORS

Comprehensive Excellence Award, Institute for Interdisciplinary Information Sciences, Tsinghua University, 2022.

Comprehensive Excellence Award, Institute for Interdisciplinary Information Sciences, Tsinghua University, 2021.

Xuetang Talents Program Scholarship, Tsinghua University, 2020.

Second-class Freshmen Scholarship, Tsinghua University, 2019.

Silver Prize, the 35th Chinese Physics Olympiad, Chinese Physical Society, 2018.

PROJECTS

AI + Social Science for Agricultural Research

- A project which studies the development of integrated chicken-fish farming in Myanmar using field investigation data combined with deep learning on historical satellite imagery. In collaboration with Peking University.

Course Projects

- For courses: Computer Vision (A+), Intelligent System and Robotics, Natural Language Processing, Deep Learning

SKILLS

Programming and Development Tools: Python (PyTorch), C, C++ ; Linux, Git, Docker, Kubernetes, LaTeX, Blender

Languages: Chinese (Native), English (TOEFL 107, CET-6 657), Japanese (Elementary)