

# Kaifeng Zhang

@ kaifeng9@illinois.edu | 🌐 kywind.github.io | 📍 Urbana, IL

## EDUCATION

---

### University of Illinois Urbana-Champaign

Ph.D. in Computer Science

Aug 2023 – Now

Advisor: Professor Yunzhu Li

### Tsinghua University

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

Sep 2019 – Jun 2023

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

## RESEARCH EXPERIENCE

---

### University of California, San Diego

Undergraduate Research Assistant

Feb 2022 – Dec 2022

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

Undergraduate Research Assistant

Jun 2021 – Jan 2022

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

---

**Magna Cum Laude**, Tsinghua University, 2023.

**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.

## SKILLS

---

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