

CHAO XU

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EDUCATION

- University of California, Los Angeles (UCLA), CA, USA** Sep. 2020 - Present
- Ph.D. Candidate, Statistics
 - Advisor: Song-Chun Zhu
 - GPA: 4.00/4.00
- University of Illinois at Urbana-Champaign (UIUC), IL, USA** Sep. 2016 - May 2020
- B.S., Computer Engineering (High Honors)
 - GPA: 3.90/4.00
- Zhejiang University (ZJU), Zhejiang, China** Sep. 2016 - June 2020
- B.Eng., Electronics and Computer Engineering
 - GPA: 3.92/4.00

RESEARCH INTERESTS

Computer Vision: 3D Object Understanding, Affordance Learning, Human-object Interaction
Machine Learning: Object-centric Learning, Generative Model, Physics-inspired Learning
Robotics & Cognition: Imitation Learning, Multi-modal Perception

RESEARCH EXPERIENCE

- Center for Vision, Cognition, Learning and Autonomy (VCLA), UCLA** Sep. 2020 - Present
Advisor: Prof. Song-Chun Zhu. *Graduate Student Researcher.*
- Beijing Institute for General Artificial Intelligence (BIGAI)** May 2021 - Sep. 2021
Advisor: Dr. Siyuan Huang. *Ph.D. Research Intern.*
- Center for Vision, Cognition, Learning and Autonomy (VCLA), UCLA** June 2019 - Sep. 2019
Cross-disciplinary Scholars in Science and Technology (CSST)
Advisor: Prof. Song-Chun Zhu. *Visiting Undergraduate Student Researcher.*

PUBLICATIONS

- PartAfford: Part-level Affordance Discovery from Cross-category 3D Objects** ECCV 2022 VOLI Workshop
• **Chao Xu**, Yixin Chen, He Wang, Song-Chun Zhu, Yixin Zhu, Siyuan Huang [\[Paper\]](#) [\[Video\]](#)
- We present a new PartAfford task for part-level affordance discovery. Compared to the prior densely-supervised learning paradigm, PartAfford learns the visual object affordance in a more natural manner.
 - We propose a novel learning framework for tackling PartAfford, which jointly abstracts 3D objects into part-level representations and discovers the affordance by learning the affordance correspondence.
 - We build the benchmark for learning and evaluating PartAfford by curating a dataset consisting of 3D objects and annotated part-level affordances.

SELECTED HONORS & AWARDS

- Outstanding Graduates, Zhejiang University 2020
- Best Presentation Award, CSST, University of California, Los Angeles 2019
- Meritorious Winner (Top 10%), Mathematical Contest in Modeling (MCM) 2018
- National Scholarship (Top 1.5%), Ministry of Education of P.R. China 2017
- First-Class Scholarship (Top 3%), Zhejiang University 2017

INVITED TALKS

- Part-level Affordance Discovery from 3D Objects**, MURI Annual Meeting Dec. 2021

TEACHING

Teaching Assistant for STATS 10: Introduction to Statistical Reasoning, UCLA
Teaching Assistant for ECE 220: Computer Systems & Programming, UIUC
Teaching Assistant for CS 225: Data Structures, UIUC

Fall 2021, Winter 2022
Fall 2019
Spring 2019