# Kaihong Wang

 $Boston University, Boston, MA \\ +1 857-654-5276 \diamond kaiwkh@bu.edu \diamond [Webpage] \diamond [Google Scholar]$ 

# **RESEARCH INTERESTS**

Un/Semi-/Self-supervised Learning, Domain Adaptation, Pose Estimation, Semantic Segmentation

## EDUCATION

| Boston University                           | Feb. 2020 - Present   |
|---|-----------------------|
| Ph.D., Department of Computer Science       |                       |
| Advisor: Margrit Betke                      |                       |
| GPA: 3.88/4.00                              |                       |
| Boston University                           | Sep. 2018 - Jan. 2020 |
| M.S., Department of Computer Science        |                       |
| Advisor: Margrit Betke                      |                       |
| GPA: 3.93/4.00                              |                       |
| South China University Of Technology (SCUT) | Sep. 2014 - June 2018 |
| B.E., Department of Software Engineering.   |                       |
| GPA: 3.59/4.00                              |                       |

# PUBLICATIONS

Wang K, Zhang L, Zhang J, "Detecting Human Artifacts from Text-to-Image Models", ArXiv. [Pa-per][Code]

Wang K, Kim D, Feris R, Saenko K, Betke M, "Exploring Consistency in Cross-Domain Transformer for Domain Adaptive Semantic Segmentation", ICCV 2023. [Paper][Code]

Wang K<sup>\*</sup>, Kim D<sup>\*</sup>, Saenko K, Betke M, Sclaroff S, "A Unified Framework for Domain Adaptive Pose Estimation", ECCV 2022. [Paper][Code]

Kim D, Wang K, Sclaroff S, Saenko K, "A Broad Study of Pre-training for Domain Generalization and Adaptation", ECCV 2022. [Paper][Code]

Wang K, Akash K, Teruhisa M. "Learning Temporally and Semantically Consistent Unpaired Videoto-video Translation Through Pseudo-Supervision From Generated Optical Flow", AAAI 2022. [Paper] [Code]

Wang K, Yang C, Betke M. "Consistency Regularization with High-dimensional Non-adversarial Source-guided Perturbation for Unsupervised Domain Adaptation in Segmentation", AAAI 2021. [Paper] [Code]

Yang C, Ablavsky V, **Wang K**, et al. "Learning to Separate: Detecting Heavily-Occluded Objects in Urban Scenes", ECCV 2020. [Paper] [Code]

**Wang K**<sup>\*</sup>, Jalal M<sup>\*</sup>, Jefferson S, et al. "Scraping Social Media Photos Posted in Kenya and Elsewhere to Detect and Analyze Food Types",Proceedings of the 5th International Workshop on Multimedia Assisted Dietary Management. ACM. [Paper] [Code]

### WORK EXPERIENCE

### Adobe Research

Research Scientist/Engineer Intern

Aug. 2023 - Dec. 2023

• Research Topic: Improving Human Structural Coherence in Diffusion Models

• Supervisor: Dr. Jianming Zhang

## Amazon

Applied Scientist Intern

- Research Topic: Self-supervised Learning
- Supervisor: Dr. Sharon Alperts

# Honda Research Institute, USA

Research Intern

- Research Topic: Unpaired Video-to-Video Translation
- Supervisor: Dr. Kumar Akash, Dr. Teruhisa Misu

## PATENTS

Misu T, Akash K, Wang K. System and method for learning temporally consistent video synthesis using fake optical flow: U.S. Patent Application 17/500,176[P]. 2022-12-1.

## TEACHING EXPERIENCE

## **Boston University**

- 2022 Spring: CS542 Machine Learning, Teaching Fellow.
- 2021 Fall: CS506 Computational Tools for Data Science, Teaching Fellow.
- 2020 Fall: CS440 Artificial Intelligence, Teaching Fellow.

## **PROFESSIONAL ACTIVITIES**

- Reviewer of CVPR 2021, 2022, ECCV 2022, ICCV 2023
- Program Committee Member of AAAI 2023

## AWARDS

| Second prize scholarship of South China University Of Technology | 2016 |
|--|------|
| Merit Student of South China University Of Technology            | 2016 |

Jan. 2021 - May. 2021