

Y. SATO LAB.

Computer Vision

Department of Informatics and Electronics



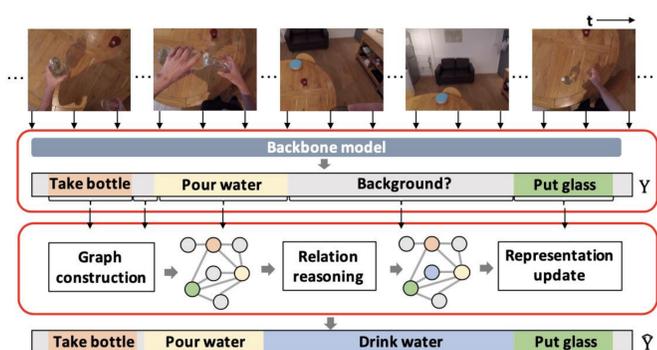
Visual Media Engineering

Department of Information and Communication Engineering, GSIST /
Emerging Design and Informatics Course, GSIS<https://www.ut-vision.org/sato-lab/>

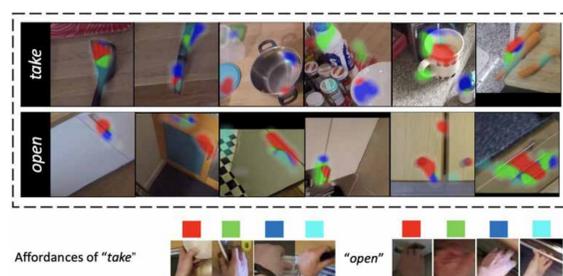
Computer Vision for Sensing and Understanding Human Behavior

Computational understanding of human behavior in the real environment is essential for the realization of AI systems that can accompany people and provide them with necessary support when needed. In this laboratory, we specialize in computer vision, and are working on the development of technologies to acquire knowledge about interactions between people and objects, people and people, and people and environments, using different types of videos, such as first-person view videos captured by wearable cameras and fixed-view videos from cameras installed in the environment.

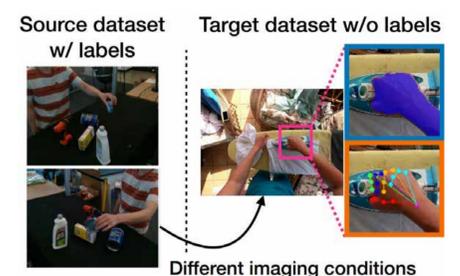
Understanding human actions

Action recognition
from first-person videos

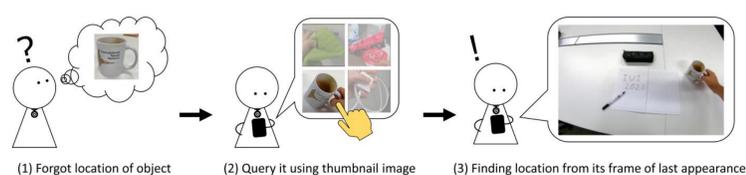
Understanding hand object interactions



Understanding hand-object interactions

Adaptation of hand pose
estimator to first-person videos

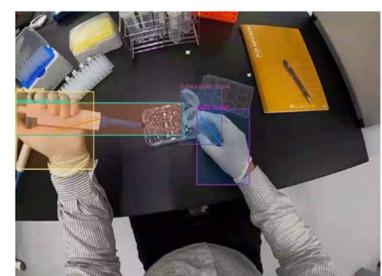
Application of egocentric vision

Wearable camera-based system for
assisting users in finding lost objects

Skill modeling and recognition



Skill-level estimation and visualization

Visual understanding of
biological experiments