

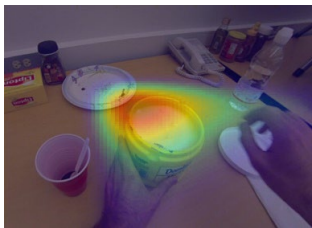
Computer Vision



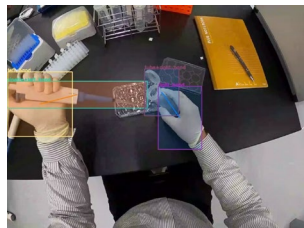
Our laboratory conducts advanced research in computer vision. In particular, we focus on analyzing diverse forms of visual data—especially egocentric videos captured by wearable cameras—to model and analyze complex interactions among humans, objects, and environments. Leveraging recent advances in large-scale vision-language and multimodal models, our work aims to develop foundational technologies for understanding human-centered interactions in real-world contexts.

Laboratory web page: <http://ut-vision.org/sato-lab/>

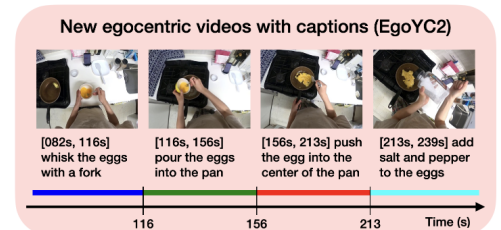
Examples of research topics



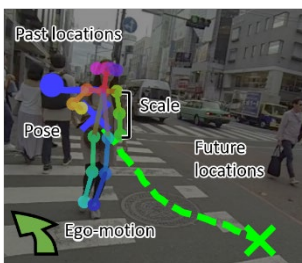
Visual attention from first person video



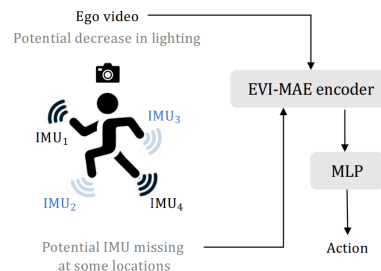
Visual understanding of biology experiments



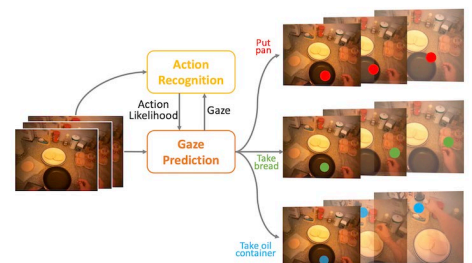
Generating step descriptions of complex activities



Egocentric trajectory prediction



Multimodal action recognition from videos and IMU data



Joint prediction of egocentric action and gaze

Life in the lab

- ✓ In our laboratory, we value that our members can pursue their research independently with enjoyment, driven by intellectual curiosity and free thinking. We also hope that our students develop the ability to identify an important research problem, find an effective solution with a deep understanding of the problem, and communicate persuasively with others about their research outcomes. Additionally, we are actively promoting international research collaborations and encourage our students to undertake long-term research visits at overseas institutions.
- ✓ To ensure that everyone can conduct their research freely, our laboratory provides sufficient computing resources both locally and in the cloud. In addition, various devices such as eye-tracking systems are also available for use.