CSGI

Y. Sato LAB.

[Computer Vision]

Center for Socio-Global Informatics

Visual Media Engineering

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Computer Vision for Sensing Human Behaviors and Assisting Human Interactions

Toward the development of information systems that can casually offer assistance to those who need it, we develop various computer vision techniques for sensing and understanding human behaviors including visual focus of attention and human interactions in real world. In addition, we have developed interactive systems for supporting human activities.

Understanding Human Attention and Activities Measured gaze position Prismatic Round Flat **Object attributes** Action (M) (Scoop) Grasp types (G_l) G_{r} Índex Finger Our prediction Extension Prismatic (3)Image evidence



Discovering objects of joint attention from multiple first-person videos

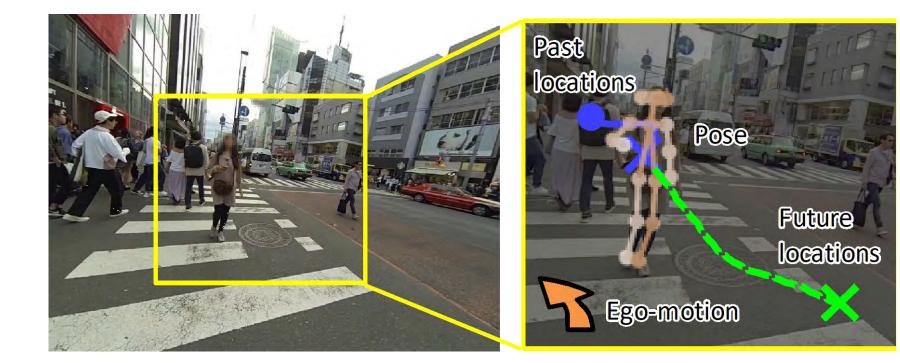


Grasp recognition for first-person videos

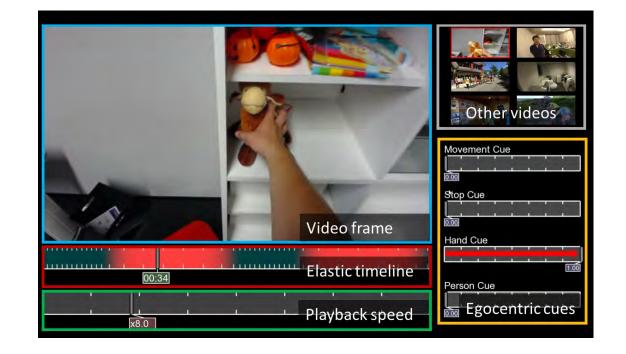


Predicting gaze position in first-person videos

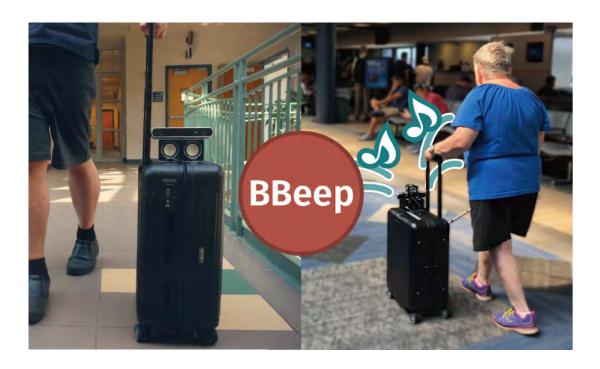
Recognizing and Supporting Human Interactions



Forecasting future locations of people in first-person videos



Ego-scanning interface for browsing first-person videos



A Sonic Collision Avoidance System for Blind Travellers

