Murase Lab

Department of Media Science,
Graduate School of Information Science

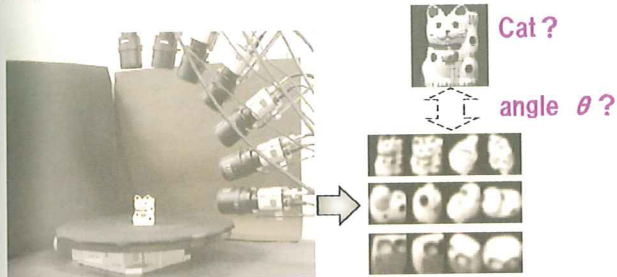# Murase Laboratory
(Prof. Murase and Associate Prof. Ide)

Object recognition from multiple viewpoint images

Estimated a suitable camera arrangement for object recognition and pose estimation from multiple viewpoint images.

Cat ?

angle θ ?

Recognition of low-resolution characters captured by camera-equipped phone

Developed a method to recognise low-quality characters using multiple frames of video data. Developed a training method that takes the actual degradations into consideration.

low-resolution character

training data
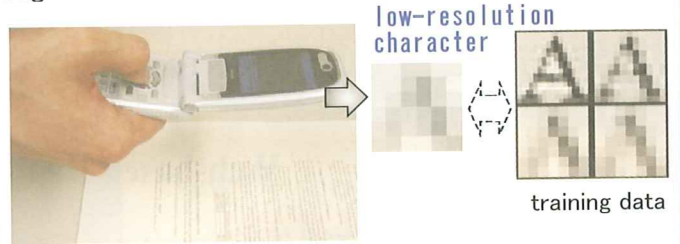
Recognition of various objects in images captured by car-mounted camera

Built technologies to support drivers using car -mounted camera to recognize the weather condition and traffic signs.

car-mounted camera

traffic sign recognition

input result single multi

rain drop detection

Construction of a Street Image Map using car-mounted omni-directional camera

Constructed a Street Image Map database, which integrates images and information from GPS for car navigation systems.

omni-directional camera

transition of street image
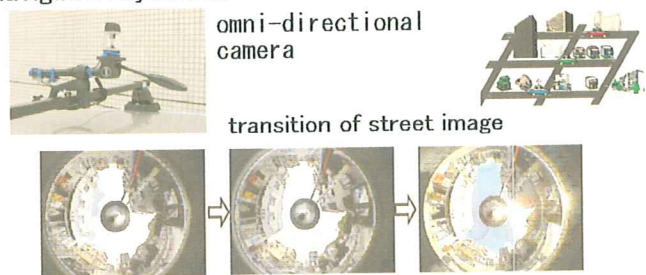
Fast video retrieval in a long video stream

A videodata retrieval technology can be applied to construct a TV commercial database or analyse TV news. We developed a fast method to retrieve all identical video segments from a long video stream.

01:42:30   02:23:37

01:43:00   01:54:50
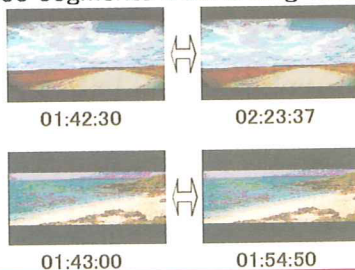
News video understanding

Developed a method for detecting monologue scenes in news videos based on multimedia informations. Developed also a method for extracting the relationships among people in videos.

monologue scene