Oral presentation | Code-sharing session | 【CS.1】 Code-sharing Session 3.3 & 4.4

[18p-E215-1~9]【CS.1】 Code-sharing Session 3.3 &4.4

Ryoichi Horisaki(Osaka Univ.), Hirotsugu Yamamoto(Utsunomiya Univ.)

Wed. Sep 18, 2019 1:15 PM - 4:15 PM E215 (E215)

△：Presentation by Applicant for JSAP Young Scientists Presentation Award

▲：English Presentation

▼：Both of Above

No Mark：None of Above

2:45 PM - 3:15 PM

▲[18p-E215-5][INVITED] High-Resolution 3D Modeling using Photometric and Polarimetric Techniques

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Keywords:shape from polarization, photometric stereo

3D modeling is a fundamental problem in computer vision. The emergence of low-cost depth sensor such as the Kinect brings various computer vision problems to the 3D world, but the resolution of 3D information it provides is significantly lower than what a modern 2D camera can capture. This presentation will introduce how active and passive illumination changes reveal high-resolution 3D information in real-world scenes, which is equivalent to the number of pixels of a 2D imaging sensor. By introducing state-of-the-art photometric stereo and shape from polarization techniques, this presentation hopes to provide inspiring cues for designing the next-generation 3D camera.