

calculated (refer to [Figure 14]). [Figure 15] shows the average object recognition rates for Area A and Area B. As the results of the measurement, the recognition rate was found to be 100%, meaning the recognition of the existence of an object was made successfully each of the 1,000 times this test was repeated

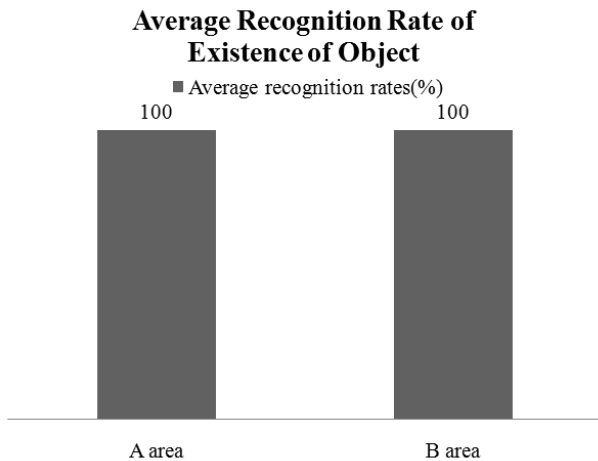


Fig. 35 Average Recognition Rate of Existence of Object

[Figure 16] shows a user conducting spatial interactions using actual contents. In [Figure 16] (a), a user is moving contents on the screen to the left through a snap gesture to the left, and in [Figure 16] (b), a user is comparing information on an object after placing the object on the table

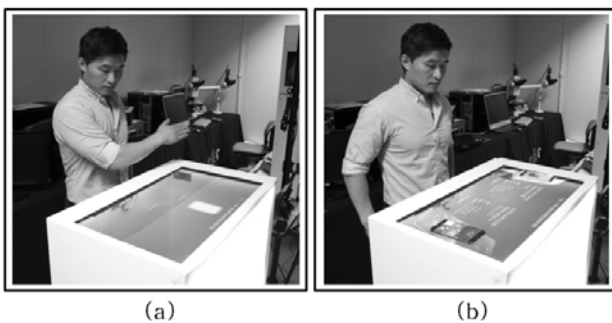


Fig. 46 User Test

(a) Snap gesture to the left, (b) recognition of existence of an object

6 Conclusion

In this study, a method for controlling information presented on a table-type display using a single depth camera, without any actual touching of the

device, was proposed. The hardware configuration for applying the proposed method was explained, and the overall process was described. Using the proposed system, a user was able to conduct spatial interactions through hand movements in the air. Further, it was possible for the user to place an object on the table and check information related to it following the system's recognition of the existence of the object.

References:

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