

Prof. Yasuhiro Matsuda, Kanagawa Institute of Technology, Japan

**Finger Braille Teaching System**

 Abstract: Finger Braille is one of the communication media of deafblind person. In Finger Braille, a sender dots the Braille code on the fingers of the receiver as if the sender types on a Braille typewriter. Then the receiver recognizes the dotted Braille code. To assist communication between deafblind individuals and non-disabled people, we have been developing a Finger Braille teaching system using tablet computers. The teaching system recognizes the speech of a non-disabled person and displays the associated dot pattern of Finger Braille. The non-disabled person can then dot Finger Braille on the fingers of the deafblind person by observing the displayed dot pattern. The intent of the support device is to assist not only verbal communication but also non-verbal (emotional) communication. To assist in emotional communication, we have been developing an emotion teaching system and an emotion recognition system. The emotion teaching system teaches the non-disabled person to express emotions.

Bio: Prof. Yasuhiro Matsuda obtained his Ph.D. degree from the University of Tokyo in 2007. He joined the Department of Welfare Systems Engineering at Kanagawa Institute of Technology in 2000, and later joined the Department of Robotics and Mechatronics. Now, he is a professor and department chair of the Department of Clinical Engineering. Prof. Matsuda’s expertise is in the field of assistive technology for deaf and/or blind persons and measurement engineering. Currently, his main research interest is in the development of the communication support system using Finger Braille for deafblind person and tactual communication tool for elderly person.