



Abstract

We understand present environment around self-body by acquiring not only visual information but also somatosensory information with touching objects and with moving body and limbs. In this study, we aim to convey the somatosensation in the telecommunication by using a force display gadget 'Buru-Navi' we developed. Once appropriate dynamic force sensation is given, which matches to a first person perspective video scene, **user will obtain an immersive sensation of being in the video scene.** In cases of visually impaired persons and conditions, **an appropriate force sensation induced by this gadget will be informative in knowing surrounding walls and obstacles.** New technologies of conveying somatic information, as well as visual and auditory information, will enrich the telecommunication between individuals and even between computer and human.



Force sensation induced by this gadget will be informative in knowing surrounding walls and obstacles without directly touching environmental objects.

A force display gadget 'Buru-Navi4 Finger Force (B4FF)' dynamically changes direction and amplitude of the force sensation according to the visual experience. Different type of Buru-Navi4 formed as a smartphone shell case (B4SF-P) will be able to give a bodily sensation of riding a car.

Force display gadget will facilitate us to **feel an immersive sensation of being in the video scene** when force sensation is suitable. That effect would be useful to **inform the action direction and its timing in the sport performance**, which is hard to be captured by the visual information.

References

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