

Nomura Lab., Faculty of Engineering, Nagaoka University of Technology, Japan

Pulse wave meets Virtual Reality

1. Visualizing the pulse wave in VR world

- An object which synchronizes with the human pulse wave:

The movement and brightness of the flying object changes its appearance according to the human pulse wave in a real time series.



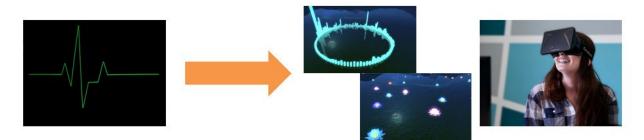
When the pulse is fast and large



When the pulse is slow and small

2. <u>A new VR architecture as a biofeedback system</u>

- Feedback of the pulse wave in the form of visual, acoustic, and haptic stimulus in VR world entrains human body functioning and induces relaxation in mind.



Ref: Ambient Feedback System Lab.: http://kjs.nagaokaut.ac.jp/nomura/afs/

3. Features and possible applications

"Pleasurable " and "Intuitive " medical instrument for the personal use, targeting on complementary and alternative medicine

- Long- term healthcare tool with low dropout rate by its pleasurable architecture
- Easy to grasp daily health state without expertise by its intuitive interface