Reproducible evaluation on our sequential states for social improvement

R&D Project Title : Happiness evaluation by visual index using multimodal AI

Project Leader : Toru NAKAZAWA

Professor and Chairman, Department of Ophthalmology, Tohoku University Graduate School of Medicine

Summary :

Loss of visual function could affect the happiness in terms of limitation of daily life and independence, as about 80% of the information obtained from the outside world is visual. For those who have visual impairment, especially in case that is difficult to recover by medical treatment, improving their well-being is essential. We consider it is important social issue to develop digital device to help them gain a sense of accomplishment by proactive behavior.

We intend to develop method for qualification of optimized status of individuals in terms of visual impairment from physiological data, photos of face and eye, and voice by adopting machine learning, in addition to establishing new method of evaluation of subjective wellbeing focused on visual information.

We also intend to explore biomarkers reflecting biometric information and construct well-being index with scientific evidence. In the future, we aim to contribute to the society in which we can realize mutual cooperation by encouraging individuals to change behavior toward improvement of lifestyle habits and maintaining their lifelong visual function.

Analyzing happiness using multimodal data



