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Curriculum Vitae

Seitaro Iwama

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Education

Keio University

Ph.D. Graduate School of Science and Technology,
School of Fundamental Science and Technology
September 2020 – Present
Kanagawa, Japan

Keio University

M.Eng. Graduate School of Science and Technology,
School of Fundamental Science and Technology
April 2019 - September 2020
Kanagawa, Japan

Keio University

B.Eng. Faculty Science and Technology,
Department of Biosciences and Informatics
April 2015 - March 2019
Kanagawa, Japan

Skills

- **Programming :** MATLAB, Python
- **Fields :** sensorimotor neuroscience, brain-computer interface/brain-machine interface (non-invasive), machine-learning

Publications

Published Articles

First Author

- Iwama S, Tsuchimoto S, Hayashi M, Mizuguchi N, Ushiba J. Scalp electroencephalograms over ipsilateral sensorimotor cortex reflect contraction patterns of unilateral finger muscles. *Neuroimage* 222, 117249, 2020.

Co-Author

- Tsuchimoto S, Shibusawa S, Iwama S, Okuyama K, Mizuguchi N, Kato K, Ushiba J. Use of common average reference and large-Laplacian spatial filters enhances EEG signal-to-noise ratios in intrinsic sensorimotor activity. *J Neurosci Methods* 353, 109089, 2021.

Presentations

Oral

- Iwama S, Ushiba J. Towards stereotaxic induction of neural plasticity using brain-computer interfaces for effective neurorehabilitation. The 10th APRU Population Aging Conference, 2019.

Poster

- Iwama S, Takufumi Y, Ushiba J. Pre-movement interhemispheric synchronicity of sensorimotor activities is associated with the sustained anti-phase bimanual tapping. The 50th Annual Meeting of the Society for Neuroscience, 2021.
- Iwama S, Kokubo T, Ushiba J. Prolonged Aftereffect of Sensorimotor Adaptation to Gradually Increased Joint Resistance through a Wearable Robotic Device Controlled by Magneto-Rheological Fluid. ACM CHI 2021. Workshop: Human Augmentation for Skill Acquisition and Skill Transfer, 2021.
- Hirose R, Iwama S, Ushiba J. Increased feeling of body-ownership to realistic visual feedback in brain-computer interface activates sensorimotor cortex excitability. The 12th FENS Forum of Neuroscience, 2020.
- Morishige M, Iwama S, Ushiba J. Effects of gamification on brain-computer interface training. The 26th Annual Meeting of the Organization for Human Brain Mapping, 2020.
- Iwama S, Tsuchimoto S, Hayashi M, Ushiba J. Decoding of unilateral finger-movement patterns from high-density Scalp EEG: a data-driven approach. The 25th Annual Meeting of the Organization for Human Brain Mapping, 2019.

Award

- Encouragement awards at the 8th science-intercollege, Ministry of Education, Culture, Sports, Science and Technology, 2019.

Misc

- Ushiba J, Iwama S, Liu M. Mechanisms, Evidences, and Meta-analysis in Brain-Machine Interface Based Motor Exercise, Jpn J Rehabil Med 57 (10), 956-964, 2020.