

# Joonsik Moon

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**Current Position**      **Northeastern University, Boston, MA, US**  
Ph.D. Candidate in Psychology (Sep 2022 ~ current)  
Advisor: Peter Bex

**Education**              **State University of New York College of Optometry, New York, NY, US**  
M. S. in Vision Science (May 2021)  
Advisor: Robert M. McPeck

**Seoul National University of Science and Technology, Seoul, Republic of Korea**  
M. S. in Optometry (Aug 2016)  
Advisor: So Ra Kim

**Seoul National University of Science and Technology, Seoul, Republic of Korea**  
B. S. in Visual Optics (Feb 2013)

**Publications**              Joonsik Moon, Peter Bex. (2025). Distinctive Feature Sensitivity of Ocular Following Initiation during Global Motion Perception. *Communications Biology*.

                                 Sangkyu Son\*, **Joonsik Moon\***, Yee-Joon Kim, Min-Suk Kang, and Joonyeol Lee. (2023). Frontal-to-visual information flow explains predictive motion tracking. *NeuroImage*.  
<https://doi.org/10.1016/j.neuroimage.2023.119914>

                                 Sangkyu Son\*, **Joonsik Moon\***, Hyungoo Kang, Yee-Joon Kim, and Joonyeol Lee. (2021). Induced astigmatism biases the orientation information represented in multivariate electroencephalogram activities. *Human Brain Mapping*.  
<https://doi.org/10.1002/hbm.25550>

                                 \*Equal contribution

**Work History**              **Seoul National University of Science and Technology, Seoul, Republic of Korea**  
Graduate researcher funded by Ministry of Science and ICT (2021 ~ 2022)  
Advisor: Moonsung Choi

**Institute for Basic Science & Sungkyunkwan University, Suwon, Republic of Korea**  
Graduate researcher at Center for Neuroscience Imaging Research (2017 ~ 2019)  
Advisor: Joonyeol Lee

**Korea University, Seoul, Republic of Korea**  
Research intern at Brain and Cognitive Engineering (2016 ~ 2017)  
Advisor: Christian Wallraven

## Presentations

**Joonsik Moon**, Peter Bex. (2025). Mechanisms Underlying the Contribution of Spatial Frequency of Disparity and Vergence to Depth Perception in Stereopsis. Poster Presentation at *Vision Science Society*.

**Joonsik Moon**, Peter Bex. (2023). Effects of Local and Global Cues on Oculomotor and Perceived of Movement. Poster Presentation at *Vision Science Society*.

Sangkyu Son, **Joonsik Moon** and Joonyeol Lee. (2021). The effect of temporal expectation on motion direction representation of an occluded object. Poster Presentation at *Society for Neuroscience*.

**Joonsik Moon**, Sangkyu Son and Joonyeol Lee. (2021). The role of alpha oscillation in combining motion direction representations with temporal expectations. Poster Presentation at *Conference of the Korean Society for Cognitive and Biological Psychology*.

**Joonsik Moon** and Joonyeol Lee. (2018). The effect of combined directional and temporal expectations on the initiation of smooth pursuit eye movements, Poster Presentation at *the 21st Annual Meeting of the Korean Society for Brain and Neural Sciences*.

**Joonsik Moon**, Mijung Park, and So Ra Kim. (2016). The effect of hyperopic astigmatism on letter legibility in ETDRS chart and psychometric function, Oral Research Presentation at *Summer Conference of the Korean Ophthalmic Optics Society*.  
**(Winner, Best Oral Presentation)**

**Joonsik Moon**, Mijung Park, and So Ra Kim. (2016). The effect of hyperopic astigmatism on letter legibility in low contrast ETDRS chart and psychometric function, Poster Presentation at *Summer Conference of the Korean Ophthalmic Optics Society*.

Hyun Young Byun, Hyung Kyung Sung, **Joonsik Moon**, A Young Lee, Se Young Kwon, So Ra Kim and Mijung Park. (2013). The comparison of cleaning efficacy between contact lens care solutions according to critical micelle concentration and surface tension of surfactant, Oral Presentation at *Winter Conference of the Korean Ophthalmic Optics Society*.

**Joonsik Moon**, Woo Hyun Seo, Jeong Seon Kim, Mijung Park and So Ra Kim. (2013). The composition of ingredients in commercially available contact lens care products and their actual description status. Poster Presentation at *Summer Conference of the Korean Ophthalmic Optics Society*.

Byung-Hyuk Joo, **Joonsik Moon**, Mijung Park and So Ra Kim. (2013). The change of accommodative function by myopic status and color tones of ophthalmic lenses. Poster Presentation at *Summer Conference of the Korean Ophthalmic Optics Society*.

Nam Yul Ryu, **Joonsik Moon**, Mijung Park, So Ra Kim. (2012). The correlation between total high order aberrations and age when analyzed by the degree of refractive error. Poster Presentation at *Proceeding of Asia Pacific Optometric Congress. Advancing Education in Optometry*.

## Research Skills

Matlab for Psychophysical experiment & Multivariate EEG data analysis and Spectral analysis

Python for Deep learning (Numpy, Pytorch)

## Research Experience

Human EEG experiments and Multivariate EEG data analysis

Training Non-human Primates for electrophysiology research

Bioinformatics data analysis

National R&D Projects by Ministry of Food and Drug Safety (MFDS). (2013). “A developmental study on the assessment of the efficacy of topical antiseptics and contact lenses”