

# BYUNG-IL OH

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INTERESTS	Working memory, Ensemble representation, Computational modeling, Human neuroimaging	
EDUCATION	<b>Sungkyunkwan University</b> <ul style="list-style-type: none"><li>- Bachelor of Arts in Psychology</li><li>- Bachelor of Science in Engineering, Interdisciplinary Program of Convergence Software</li></ul>	Seoul, Republic of Korea Mar. 2013 – Present
RESEARCH EXPERIENCES	<b>Visual Cognitive Neuroscience Lab</b> , Sungkyunkwan University <i>Research Assistant</i> (Advisor: Prof. Min-Suk Kang) <ul style="list-style-type: none"><li>- Led project on working memory and ensemble representation. Ran behavioral and EEG experiments. Set up and managed EEG environment and participant pool.</li></ul> <b>Sensorimotor Cognition Laboratory</b> , Center for Neuroscience Imaging Research, Institute of Basic Science <i>Intern</i> (Advisor: Prof. Jun-Yeol Lee) <ul style="list-style-type: none"><li>- Participated in pilot project on smooth pursuit eye movement and memory. Ran behavioral experiment with eye-tracker and presented result by poster. Learned basics of MRI and fMRI.</li></ul> <b>Functional Brain Mapping Lab</b> , Center for Neuroscience Imaging Research, Institute of Basic Science <i>Undergraduate Assistant</i> (Advisor: Prof. Yunbok Kim) <ul style="list-style-type: none"><li>- Assisted in setting lab environment of rodent optical imaging. Observed rat surgery. Participated in lab meeting by giving presentation.</li></ul>	Seoul, Republic of Korea Feb. 2015 – Aug. 2018  Suwon, Republic of Korea Jun. 2016 – Jul. 2016  Suwon, Republic of Korea Jun. 2015 – Aug. 2015
PUBLICATIONS & MANUSCRIPTS IN PROGRESS	<ol style="list-style-type: none"><li>1. <b>Oh, B.-I.</b>, Kim, Y.-J., Kang, M.-S. (under review). Ensemble representations reveal distinct neural coding of visual working memory.</li><li>2. Son, G., <b>Oh, B.-I.</b>, Kang, M.-S., &amp; Chong, S. C. (under review). Similarity-based clusters are representational units of visual working memory.</li><li>3. Kang, M.-S. &amp; <b>Oh, B.-I.</b> (2016). Grouping influences output interference in short-term memory: a mixture modeling study. <i>Frontiers in Psychology</i>, 7:585, 1-6.</li></ol>	
PRESENTATIONS	<ol style="list-style-type: none"><li>1. Kang, M.-S., <b>Oh, B.-I.</b>, &amp; Kim, Y. (2018). Neural coding schemes of anterior and posterior brain regions in the formation of cluster representation in visual working memory. Poster presented at the 18th Annual Meeting of the <i>Society for Neuroscience</i>, SD., U.S.</li><li>2. Son, G., <b>Oh, B.-I.</b>, Kang, M.-S., &amp; Chong, S. C. (2018). Similarity-based clusters are the representational units of visual working memory. Poster presented at the 18th Annual Meeting of the <i>Vision Science Society</i>, St. Pete Beach, FL., U.S.</li><li>3. <b>Oh, B.-I.</b> &amp; Kang, M.-S. (2018). Cluster representation during maintenance in visual working memory. Poster presented at the 18th Annual Meeting of <i>Korean Society for Cognitive and Biological Psychology</i>, Suwon, Republic of Korea.</li><li>4. Son, G., <b>Oh, B.-I.</b>, Kang, M.-S., &amp; Chong, S. C. (2018). Similarity-based clusters are the representational units of visual working memory. Poster presented at the 18th Annual Meeting of <i>Korean Society for Cognitive and Biological Psychology</i>, Suwon, Republic of Korea.</li><li>5. <b>Oh, B.-I.</b> &amp; Kang, M.-S. (2017). Time is needed for memory to be biased toward an ensemble average. Poster presented at the 17th Annual Meeting of the <i>Vision Science Society</i>, St. Pete Beach, FL., U.S. Abstract published in <i>Journal of Vision</i>, 17(10), 350.</li></ol>	

TECHNICAL SKILLS	<b>Advanced</b> MATLAB (including Psychtoolbox, EEGLAB, FieldTrip) <b>Moderate</b> Python (including PsychoPy, PyMC3, Keras), R (including Stan) <b>Beginner</b> C/C++, C#, Java, HTML/CSS, JavaScript, MySQL, PHP, Django, Unity, Arduino	
TEACHING EXPERIENCES	<b>Brain, Mind, and Behavior (PSY3013-01),</b> Department of Psychology, Sungkyunkwan University <i>Teaching Mentor</i> <ul style="list-style-type: none"> <li>- Gave summary presentation of cognitive neuroscience topics such as neuroimaging method, perception, attention, memory, decision making, social neuroscience to classmates.</li> </ul> <b>Perception (PSY3008-01),</b> Department of Psychology, Sungkyunkwan University <i>Teaching Mentor</i> <ul style="list-style-type: none"> <li>- Covered psychometrics, visual, auditory, and somatosensory perception. Summarized study material for class buddies. Answered their question and led discussion on topic.</li> </ul>	Seoul, Republic of Korea Fall 2016  Seoul, Republic of Korea Spring 2015
EXTRA-CURRICULAR ACTIVITIES	<b>Cognitive Psychology Student Club,</b> Sungkyunkwan University <i>Regular Member</i> <ul style="list-style-type: none"> <li>- Participated in projects on memory, attention, consciousness, face recognition, motion perception, time perception, and navigation. Ran experiment, analyzed data, wrote paper, and gave poster and oral presentations.</li> </ul> <i>President</i> <ul style="list-style-type: none"> <li>- Organized club meeting and funding. Programmed experiment and ran statistical analysis. Made decision on project. Taught members MATLAB and Psychtoolbox.</li> </ul> <b>Data Analysis Student Club,</b> Sungkyunkwan University <i>Regular Member</i> <ul style="list-style-type: none"> <li>- Studied statistics, data analysis, machine learning, R, python. Participated in project on network analysis. Entered competition of recommendation system.</li> </ul>	Seoul, Republic of Korea Apr. 2014 – Nov. 2017  Jan. 2015 – Dec. 2015  Seoul, Republic of Korea Mar. 2016 – Nov. 2017
WORK EXPERIENCES	<b>KATUSA</b> (Korean Augmentation to the United States Army), Republic of Korea Army <i>Administrative Specialist</i> <ul style="list-style-type: none"> <li>- Performed mandatory military service. Worked with Eighth U.S. Army.</li> </ul>	Republic of Korea Oct. 2018 – Present

Last Updated: January 23, 2019