

# BYUNG-IL OH

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INTERESTS	Working memory, Ensemble representation, Computational modeling, Neuroimaging	
EDUCATION	<b>Sungkyunkwan University</b> - B.S. in Psychology & B.S. in Convergence Software	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) - Led project on working memory and ensemble representation. Led discussion of neuroimaging decoding. Ran behavioral and EEG experiment. Set up and managed EEG environment and participant pool.  <b>Sensorimotor Cognition Laboratory</b> , Center for Neuroscience Imaging Research, Institute of Basic Science <i>Summer Intern</i> (Advisor: Prof. Jun-Yeol Lee) - Led 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.  <b>Functional Brain Mapping Lab</b> , Center for Neuroscience Imaging Research, Institute of Basic Science <i>Undergraduate Assistant</i> (Advisor: Prof. Yunbok Kim) - Assisted lab environment setting of rodent optical imaging. Observed rat surgery. Participated in lab meeting by giving presentation.	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. (submitted). 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 (Psychtoolbox, EEGLAB, FieldTrip), Python (Psychopy, PyMC) <b>Moderate</b> R (Stan), C, Java, HTML/CSS, JavaScript, MySQL, Photoshop, Illustrator <b>Beginner</b> C++, C#, PHP, Django, Unity, Arduino	
SCHOLARSHIPS	Samsung Convergence Software Course Scholarship (~\$3,000) Korea Student Aid Foundation Scholarship (~\$12,000) Sungkyunkwan University Scholarship (~\$12,000)	Spring 2015 – Fall 2016 Spring 2013 – Fall 2016 Spring 2013 – Fall 2016
TEACHING EXPERIENCES	<b>Brain, Mind, and Behavior</b> , Sungkyunkwan University <i>Teaching Mentor</i> - Gave summary presentation of cognitive neuroscience topics such as neuroimaging method, perception, attention, memory, decision making, social neuroscience to classmate.  <b>Perception</b> , Sungkyunkwan University <i>Teaching Mentor</i> - Covered psychometrics, visual, auditory, somatosensory, gustatory perception. Summarized study materials for class buddy. Answered their question and led discussion on topic.	Seoul, Republic of Korea Fall 2016   Seoul, Republic of Korea Spring 2015
EXTRA-CURRICULAR ACTIVITIES	<b>Undergraduate Students Society of Cognitive Psychology</b> , Sungkyunkwan University <i>President</i> - Organized society meeting and funding. Programmed experiment and ran statistical analysis. Made decision on project.  <b>Undergraduate Students Society of Cognitive Psychology</b> , Sungkyunkwan University <i>Regular Member</i> - Participated in project on various topic such as working memory, face recognition, time perception, navigation. Ran experiment, wrote paper, gave poster and oral presentation.  <b>Undergraduate Students Society of Data Analysis</b> , Sungkyunkwan University <i>Regular Member</i> - Studied statistics, data analysis, machine learning, R, python. Entered competition of recommendation system. Participated in project on network analysis.	Seoul, Republic of Korea Jan. 2015 – Dec. 2015   Seoul, Republic of Korea Apr. 2014 – Mar. 2017   Seoul, Republic of Korea Mar. 2016 – Nov. 2016
MILITARY SERVICE	<b>KATUSA</b> (Korean Augmentation to the United States Army), Republic of Korea Army <i>Administrative Specialist</i> - Performed mandatory military service. Worked with Eighth U.S. Army.	Republic of Korea Oct. 2018 – Present

Last Updated: January 10, 2019