

BYUNG-IL OH

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INTERESTS	Working memory, Ensemble representation, Computational modeling, Human neuroimaging	
EDUCATION	Sungkyunkwan University <ul style="list-style-type: none">- Bachelor of Arts in Psychology- Bachelor of Science in Engineering, Interdisciplinary Program of Convergence Software	Seoul, Republic of Korea Mar. 2013 – Present
RESEARCH EXPERIENCES	Visual Cognitive Neuroscience Lab , Sungkyunkwan University <i>Research Assistant</i> (Advisor: Prof. Min-Suk Kang) <ul style="list-style-type: none">- Led project on working memory and ensemble representation. Ran behavioral and EEG experiments. Set up and managed EEG environment and participant pool. Sensorimotor Cognition Laboratory , Center for Neuroscience Imaging Research, Institute of Basic Science <i>Summer Intern</i> (Advisor: Prof. Jun-Yeol Lee) <ul style="list-style-type: none">- 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. Functional Brain Mapping Lab , Center for Neuroscience Imaging Research, Institute of Basic Science <i>Undergraduate Assistant</i> (Advisor: Prof. Yunbok Kim) <ul style="list-style-type: none">- Assisted in setting lab environment 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">1. Oh, B.-I., Kim, Y.-J., Kang, M.-S. (under review). Ensemble representations reveal distinct neural coding of visual working memory.2. Son, G., Oh, B.-I., Kang, M.-S., & Chong, S. C. (under review). Similarity-based clusters are representational units of visual working memory.3. Kang, M.-S. & Oh, B.-I. (2016). Grouping influences output interference in short-term memory: a mixture modeling study. <i>Frontiers in Psychology</i>, 7:585, 1-6.	
PRESENTATIONS	<ol style="list-style-type: none">1. Kang, M.-S., Oh, B.-I., & 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.2. Son, G., Oh, B.-I., Kang, M.-S., & 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.3. Oh, B.-I. & 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.4. Son, G., Oh, B.-I., Kang, M.-S., & 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.5. Oh, B.-I. & 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.	

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

Last Updated: January 10, 2019