BYUNG-IL OH

bioh.inbox@gmail.com

INTERESTS	Working memory, Ensemble representation, Computational modeling, Human neuroimaging

EDUCATION

Sungkyunkwan University   Seoul, Republic of Korea
- Bachelor of Arts in Psychology   Mar. 2013 – Present
- Bachelor of Science in Engineering, Interdisciplinary Program of Convergence Software

RESEARCH EXPERIENCES

Visual Cognitive Neuroscience Lab, Sungkyunkwan University   Seoul, Republic of Korea
Research Assistant (Advisor: Prof. Min-Suk Kang)   Feb. 2015 – Aug. 2018

- Led project on working memory and ensemble representation. Participated in lab meeting. Ran behavioral and EEG experiment. Set up and managed EEG environment and participant pool.

Sensorimotor Cognition Laboratory,   Suwon, Republic of Korea
Center for Neuroscience Imaging Research, Institute of Basic Science   Jun. 2016 – Jul. 2016
Summer Intern (Advisor: Prof. Jun-Yeol Lee)

- 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,   Suwon, Republic of Korea
Center for Neuroscience Imaging Research, Institute of Basic Science   Jun. 2015 – Aug. 2015
Undergraduate Assistant (Advisor: Prof. Yunbok Kim)

- Assisted in setting lab environment of rodent optical imaging. Observed rat surgery. Participated in lab meeting by giving presentation.

PUBLICATIONS & MANUSCRIPTS IN PROGRESS

1. **Oh, B.-I.**, Kim, Y.-J., Kang, M.-S. (submitted). 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. *Frontiers in Psychology*, *7:585*, 1-6.

PRESENTATIONS

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 *Society for Neuroscience*, 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 *Vision Science Society*, 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 *Korean Society for Cognitive and Biological Psychology*, 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 *Korean Society for Cognitive and Biological Psychology*, 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 *Vision Science Society*, St. Pete Beach, FL., U.S. Abstract published in *Journal of Vision*, *17*(10), 350.

TECHNICAL SKILLS	**Advanced**	MATLAB (Psychtoolbox, EEGLAB, FieldTrip), Python (PsychoPy, PyMC)
	Moderate	R (Stan), C, Java, HTML/CSS, JavaScript, MySQL, Photoshop, Illustrator
	Beginner	C++, C#, PHP, Django, Unity, Arduino

SCHOLARSHIPS		
	Samsung Convergence Software Course Honor Scholarship (~$2,000)	Fall 2015 – Fall 2016
	Korea Student Aid Foundation Scholarship (~$13,000)	Spring 2013 – Fall 2016
	Sungkyunkwan University Scholarship (~$13,000)	Spring 2013 – Fall 2016

TEACHING
EXPERIENCES

Brain, Mind, and Behavior (PSY3013-01),
Department of Psychology, Sungkyunkwan University
Teaching Mentor

Seoul, Republic of Korea
Fall 2016

- Gave summary presentation of cognitive neuroscience topics such as neuroimaging method, perception, attention, memory, decision making, social neuroscience to classmate.

Perception (PSY3008-01),
Department of Psychology, Sungkyunkwan University
Teaching Mentor

Seoul, Republic of Korea
Spring 2015

- Covered psychometrics, visual, auditory, somatosensory, gustatory perception. Summarized study material for class buddy. Answered their question and led discussion on topic.

EXTRA-
CURRICULAR
ACTIVITIES

Cognitive Psychology Student Club, Sungkyunkwan University
Regular Member

Seoul, Republic of Korea
Apr. 2014 – Nov. 2017

- Participated in various project on memory, attention, consciousness, face recognition, motion perception, time perception, navigation. Ran experiment, analyzed data, wrote paper, and gave presentation.

President

Jan. 2015 – Dec. 2015

- Organized club meeting and funding. Programmed experiment and ran statistical analysis. Made decision on project.

Data Analysis Student Club, Sungkyunkwan University
Regular Member

Seoul, Republic of Korea
Mar. 2016 – Nov. 2017

- Studied statistics, data analysis, machine learning, R, python. Participated in project on network analysis. Entered competition of recommendation system.

MILITARY SERVICE

KATUSA (Korean Augmentation to the United States Army),
Republic of Korea Army
Administrative Specialist

Republic of Korea
Oct. 2018 – Present

- Performed mandatory military service. Worked with Eighth U.S. Army.

Last Updated: January 10, 2019