

GAEUN SON

June 2022

BWLab & MackLab
University of Toronto
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EDUCATION

- 2019 – Ph.D., University of Toronto, Ontario, Canada
Major: Psychology
Advisor: Dirk Bernhardt-Walther and Michael Mack
- 2015 – 2017 M.S., Yonsei University, Seoul, Korea
Major: Cognitive Science
Advisor: Sang Chul Chong
Thesis: Similarity-based clusters are the representational units of visual working memory
- 2011 – 2015 B.A., Yonsei University, Seoul, Korea
Major: Psychology
Joint Major: Cognitive Science

RESEARCH INTERESTS

Real-world scene perception & cognition; cognitive neuroscience; generative adversarial networks; psychological dimensions; categorical perception; visual working memory; visual search

PUBLICATIONS

- Son, G.**, Walther, B. D., & Mack, M (2021). Scene wheels: Measuring perception and memory of real-world scenes with a continuous stimulus space. *Behavior Research Method.*
- Son, G.**, Oh, B., Kang, M., & Chong, S. C. (2020). Similarity-based clusters are representational units of visual working memory. *Journal of Experimental Psychology: Learning, Memory & Cognition*, 46(1), 46–59.
- Cha, O., **Son, G.**, Chong, S.C., & Blake, R. (2020). Novel procedure for generating continuous flash suppression: Seurat meets Mondrian. *Journal of Vision*, 19(14), 1-1

MANUSCRIPTS

- Son, G.**, Walther, B. D., & Mack, M (*in preparation*). Category learning biases in real-world scene perception.
- Son, G.**, Walther, B. D., & Mack, M (*in preparation*). The emergence of similarity structure of real-world scenes in human brains.
- Chen, H., **Son, G.**, & Walther, B. D. (*in preparation*). Categorization of continuously changing ambiguous scenes.
- Son, G.**, Chong, S. C. (*in preparation*). Similarity-based clustering of multi-feature objects in visual working memory
- Son, G.**, Sun, J., Im, H.Y., Albohn, D. N., Krevaga, K., Adams Jr, R. G., & Chong, S. C. (*in preparation*)

ation). Attentional effects on ensemble coding of emotion in facial crowds: Cross-cultural study.

CONFERENCE PRESENTATIONS

- Son, G.,** Walther, B. D., & Mack, M (2022). Category learning biases in real-world scene perception. Talk presentation at the 22nd Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.
- Walther, B. D., Farzanfar, D. & **Son, G.** (2022). Categorization links Perceptual Fluency and Aesthetic Pleasure. Poster presentation at the 22nd Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.
- Chen, H., **Son, G.** & Walther, B. D. (2022) Categorization of continuously changing ambiguous scenes. *Poster* presentation at the 22nd Annual Meeting of the Vision Sciences Society, Virtual meeting.
- Son, G.,** Walther, B. D., & Mack, M (2021). Scene wheels: Measuring perception and memory of real-world scenes with a continuous stimulus space. *Awarded poster* presented at the 21th Annual Meeting of the Vision Sciences Society, Virtual meeting.
- Son, G.,** & Chong, S. C. (2019). Clustering based on multiple features in visual working memory. *Poster* presented at the 19th Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.
- Son, G.,** & Chong, S. C. (2019). Clustering mechanism of stimuli with multiple features in visual working memory. Talk presented at the Annual Meeting of the Korean Society for Cognitive and Biological Psychology, Pyeongchang, Gangwon, Korea.
- Son, G.,** Oh, B., Kang, M., & 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 Sciences Society, St. Pete Beach, FL.
- Son, G.,** Oh, B., Kang, M., & Chong, S. C. (2018). Similarity-based clusters as representation units of visual work memory. *Poster* presented at the Annual Meeting of the Korean Society for Cognitive and Biological Psychology, Suwon, Korea.
- Son, G.,** & Chong, S. C. (2017). The precision of visual working memory is set by the number of subsets. *Poster* presented at the 17th Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.
- Son, G.,** & Chong, S. C. (2016). The effect of task-irrelevant global information on visual working memory capacity. *Poster* presented at the Annual Meeting of the Korean Society for Cognitive and Biological Psychology, Jeju, Korea.

HONORS & AWARDS

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| 2021 | Conference Travel Awards <ul style="list-style-type: none">- Awarded poster presentation at the 21th Annual Meeting of the Vision Sciences Society (<i>Title - Scene wheels: Measuring perception and memory of real-world scenes with a continuous stimulus space</i>) |
| 2016-2017 | External Scholarship <ul style="list-style-type: none">- Funded by Brain Korea 21+, Ministry of Education, Korea |
| 2015 | Awarded Honors <ul style="list-style-type: none">- Awarded to students with GPA of upper 10% |

- 2014 Awarded Highest Honors
- Awarded to students with GPA of upper 1%
- 2013-2014 University Internal Scholarship
- Academic scholarship for selective students
- 2013 Awarded Honors
- Awarded to students with GPA of upper 10%

RESEARCH EXPERIENCE

- 2018.03 – 2018.05 **Student Internship**
- Randolph Blake's Lab, Vanderbilt University.
 - Working on two projects including '*interaction between working memory representations and unconscious visual inputs*', and '*novel procedure of generating continuous flash suppression*.'
 - Designed, revised and performed experiments.
- 2017.09 – 2019.08 **Post-Master's Researcher**
- Vision, Cognition, and Consciousness Lab, Yonsei University.
 - Center for Cognitive Science, Yonsei University.
 - Working on three projects including '*attentional effect on face ensemble*', and '*cultural differences of ensemble perception*', '*clustering effect of feature-conjunction stimuli in visual working memory*'. (PI: Sang Chul Chong)
 - Designed, revised and performed experiments. Collected and analyzed behavioral data.
- 2015 - 2017 **Graduate Student Researcher**
- Vision, Cognition, and Consciousness Lab, Yonsei University.
 - Working on two projects including '*clustering structure in visual working memory*', and '*interaction between local and global information in visual working memory*'. (PI: Sang Chul Chong)
 - Designed, revised and performed experiments. Collected and analyzed behavioral data.
 - Presented articles and actively exchanged comments at Journal Club, in collaboration with other labs.
- 2014 – 2015 **Undergraduate Research Assistant**
- Vision, Cognition, and Consciousness Lab, Yonsei University
 - Designed research on '*impact of social anxiety level on ensemble c*

oding of emotion in facial crowd.'

- Designed, revised and performed experiments.

TEACHING EXPERIENCE

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| <i>2021 Winter</i> | Teaching Assistant (Introductory Psychology) <ul style="list-style-type: none">- University of Toronto, St. George campus |
| <i>2020 Fall</i> | Teaching Assistant (Sensation & Perception) <ul style="list-style-type: none">- University of Toronto, St. George campus |
| <i>2020 Winter</i> | Teaching Assistant (Introductory Psychology) <ul style="list-style-type: none">- University of Toronto, St. George campus |
| <i>2019 Fall</i> | Teaching Assistant (Sensation & Perception) <ul style="list-style-type: none">- University of Toronto, St. George campus |

WORKING EXPERIENCE

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|------------------|---|
| <i>2017-2019</i> | Administrative & Research Assistant <ul style="list-style-type: none">- Center for Cognitive Science, Yonsei University |
| <i>2015-2016</i> | Department Administrative Assistant <ul style="list-style-type: none">- Graduate Program in Cognitive Science, Yonsei University |

PROGRAMMING SKILLS

Python
R
Javascript & jsPsych
MATLAB & Psychophysics Toolbox