MyoungAh Kim

Vision Researcher

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Summary

4 years of research experience in human vision and human-computer interaction. Competent in conducting cognitive science experiments using methods as psychophysics, EEG, eye-tracking, and those related to usability testing; analyzing behavioral and/or psychophysiological data. Further interested in computational modeling of vision and applying them into design/system applications. Research interest include: **Human perception** (attention; perceptual organization; ensemble perception; summary statistics); **Human-computer interaction** (interface and attention guidance; visual strategies and human performance)

Education

2016 – 2019	**M.S. Cognitive Science**	Yonsei University
	Advisor: Sang Chul Chong	
	Thesis: *Representational Form of Perceptual Average* [Thesis] [Slides]	
2011 - 2016	**B.A. Psychology & Economics**	Yonsei University

Experience

2017. 8 – 2020. 8 **Graduate researcher,** *Vision Consciousness and Cognition Lab, Yonsei University*
(P.I: Sang Chul Chong)
· Investigated the representational form of ensemble summary statistics using psychophysical experiments. This research was supported by the National Research Foundation of Korea (NRF) grant funded by the Korea government (MSIT), "Efficient encoding of visual information: average and variance."

2016. 8 – 2017. 8 **Graduate researcher,** *Cognitive Engineering Square, Yonsei University*
(P.I: Kwangsu Cho)
· Conducted user experiment on TV streaming apps and evaluated their usability based on behavioral and eye-tracking data. (project in collaboration with SK Broadband)
· Developed standard for evaluating aesthetics and usability of TV interfaces using data from EEG and eye-tracking. Took primarily role in analyzing users' gaze data. (project in collaboration with Samsung Electronics)

2016.2 – 2016.8 **UX/UI designer & front-end web developer,** *Collegeplan*
· Planned & designed a web platform for a consulting service where students are matched to a college application mentor based on their academic profiles and goals. Developed client-side portion of the web using Wordpress, Bootstrap, HTML5, CSS3, jQuery.

2014.7 – 2014.08 **Summer Intern in Smart Building task force,** *Samsung SDS*
· Conducted market research on smart building solutions for the Middle East and US markets.

Publications

Kim, M., & Chong, S. C. (2020). The visual system does not compute a single mean but summarizes a distribution. *Journal of Experimental Psychology: Human Perception and Performance, 46*(9), 1013–1028. [Paper]

Conference Presentations

Kim, M. & Chong, S. C. (May, 2019). Representation form of perceptual average. Poster at the *19th Annual Meeting of the Vision Sciences Society*, St. Pete Beach, FL. [Abstract] [Poster]

Kim, M. & Chong, S. C. (Feb, 2019). The effect of set size and variance disparity on mean size estimation. Talk presented at the *Annual Meeting of the Korean Society of Cognitive and Biological Psychology*, Seoul, Korea. [Slides]

Kim, M. & Chong, S. C. (June, 2018). Mean estimation bias according to mean judgement task. Poster at the *Annual Meeting of Korean Society of Cognitive Science*, Seoul, Korea. [Poster]

Chu, D., **Kim, M.**, Kim, S., Hong, S., & Cho, K. (Feb, 2018). D-pad based authentication method with binary pressure. Talk presented at the *HCI Korea 2018 Annual Conference*, Gangwon, Korea. [Paper] [Slides]

Han, J. H., **Kim, M.**, Yoon, J. H., Kim, J. H., & Cho, K. (Feb, 2017). Evaluating UI aesthetics and usability based on EEG and eye-tracking. Case study presented at the *HCI Korea 2017 Annual Conference*, Gangwon, Korea. [Slides]

Koo, B., **Kim, M.** & Cho, K. (Feb, 2017). Cognitive conflict and conformity according to product attractiveness: based on event-related potentials. Talk presented at the *HCI Korea 2017 Annual Conference*, Gangwon, Korea. [Paper] [Slides]

Teaching Experience

INSTRUCTOR

2017	Cambridge International Examination (A-Level Psychology)	Cambridge Korea Center

Taught a course for high school students preparing A-level Psychology subject examination under the official CIE A-level curriculum. Covered 2 subjects (Psychology & abnormality, Psychology & education) which overviews basic approaches of psychology (e.g., behavioral, psychodynamic, cognitive) and its application to different issues in education/psychological disorders.

TUTOR

2018	International Baccalaureate (IB) extended essay in Psychology

Scholarships

2017 – 2018	Brain Korea 21+ Scholarship, Korean Ministry of Education Science and Technology
2016 – 2018	Graduate Teaching Assistantship, Graduate Program in Cognitive Science, Yonsei University
2016 – 2017	Graduate Office Assistantship, Graduate Program in Cognitive Science, Yonsei University

Relevant Coursework

Cognitive Science & Neuroscience
- Advanced Psychology of Cognition
- Advanced Cognitive Science
- Vision and Consciousness
- Perception and Psychophysics Practicum
- Neuroscience of Memory
- Cognitive Psychology

Neurophysiology
- Principles of Psychophysiology
- Neuroimaging

Statistics
- Advanced Psychological Statistics
- Psychological Statistics
- Introduction to Statistics

Skills

TECHNICAL	**Proficient at:**	**Familiar at:**
	MATLAB *(Psychophysics Toolbox)*	R, Python
	JASP, SPSS	Eye-tracking *(Tobii Studio Gaze Analysis Software)*
	Adobe Photoshop, Adobe Illustrator	EEG *(Software: EGI Net Station Tools 5.3)*
		HTML5, CSS3, jQuery *(WCAG standards; Bootstrap)*
LANGUAGE	Korean *(Native)*	
	English *(Fluent)*	