

Curriculum Vitae

Sung Jun Joo, Ph.D.

Personal Data

Institute for Learning & Brain Sciences
Portage Bay Building
Box 357988
University of Washington
Seattle, WA 98195
USA
Mobile: +1-206-446-7704
Email: sjjoo@uw.edu

Education

University of Washington, Seattle, WA, USA
Ph.D. – Department of Psychology, December 2012
(Advisors: Drs. Scott O. Murray & Geoffrey M. Boynton)
Yonsei University, Seoul, South Korea
M.S. – Cognitive Science, February 2008 (Advisor: Dr. Sang Chul Chong)
Korea University, Seoul, South Korea
B.Eng. – Electronics Engineering, August 2001

Academic appointments

University of Washington, Seattle, WA, USA
Postdoctoral fellow (2016. 7 ~ present) – Institute for Learning & Brain Sciences and
Department of Speech and Hearing Sciences (Advisor: Dr. Jason D. Yeatman)
University of Texas, Austin, TX, USA
Postdoctoral fellow (2013. 1 ~ 2016. 6) – Center for Perceptual systems and Departments
of Neuroscience and Psychology (Advisor: Dr. Alexander C. Huk)

Professional Career

Samsung Electronics, Suwon, South Korea (2002. 1 ~ 2006. 1)
Software engineer – Mobile communications division

Awards

- Distinguished Thesis Award – by Yonsei graduate school, 2008
- Elsevier/Vision Research Travel Award – by Vision Sciences Society, 2008
- University of Washington GPSS travel grant, 2012

Publications

([§] denotes work with students under my supervision)

Joo, S. J., Czuba, T. B., Cormack, L. K., & Huk, A. C. (in press). Separate perceptual and neural processing of velocity- and disparity- based 3D motion signals. *Journal of Neuroscience*.

Joo, S. J., Katz, N. L., & Huk, A. C. (2016). Decision-related perturbations of decision-irrelevant eye movements. *Proceedings of the National Academy of Sciences*, 113, 1925-1930.

- Poldrack, R. A., Laumann, T., Koyejo, O., Gregory, B., Hover, A., Chen, M.-Y., Gorgolewski, K. J., Luci, J., **Joo, S. J.**, Boyd, R. L., Hunnicke-Smith, S., Simpson, Z. B., Caven, T., Sochat, V., Shine, J. M., Gordon, E., Snyder, A. Z., Adeyemo, B., Petersen, S. E., Glahn, D. C., McKay, D. R., Curran, J. E., Goering, H. H. H., Carless, M. A., Blangero, J., Gougherty, R., Leemans, A., Hnadwerker, D. A., Frick, L., Marcotte, E. M., Mumford, J. A. (2015). Long-term neural and physiological phenotyping of a single human. *Nature Communications*, 6, 8885.
- Laumann, T., Gordon, E., Adeyemo, B., Snyder, A., **Joo, S. J.**, Chen, M.-Y., ... Mumford, J. A., Poldrack, R. A., Petersen, S. (2015). Functional system and areal organization of a highly sampled individual human brain. *Neuron*, 87, 657-670.
- Joo, S. J.**, & Murray, S. O. (2014). Contextual effects in human visual cortex depend on surface structure. *Journal of Neurophysiology*, 111, 1783-1791.
- Eo, K. Y., **Joo, S. J.**, & Chong, S. C. (2013). The effect of signal strength on the attentional blink. *The Korean Journal of Cognitive and Biological Psychology*, 25, 249-267.
- Joo, S. J.**, & Chong, S. C. (2013). Effects of subtle stimulus strength on the attentional blink. *Perception*, 42, 28-33.
- Joo, S. J.**, Boynton, G. M., & Murray, S. O. (2012). Long-range, pattern-dependent contextual effects in early human visual cortex. *Current Biology*, 22, 781-786.
- Joo, S. J.**, Shin, K., Chong, S. C., & Blake, R. (2009). On the nature of the stimulus information necessary for estimating mean size of visual arrays. *Journal of Vision*, 9(9):7, 1-12.
- Chong, S. C., **Joo, S. J.**, Emmanouil, T.-A., & Treisman, A. (2008). Statistical processing: Not so implausible after all. *Perception & Psychophysics*, 70, 1327-1334.
- Chong, S. C., & **Joo, S. J.** (2007). The neural mechanism of distributed and focused attention and their relation to statistical representation of visual displays. *The Korean Journal of Cognitive Science*, 18, 399-415.

Book Chapter

- Huk A. C., & **Joo S. J.** Motion Perception. In: Arthur W. Toga, editor. Brain Mapping: An Encyclopedic Reference. Academic Press: Elsevier; 2015. pp. 507-510.

Manuscripts

- Choi, V., **Joo, S. J.**, Priebe, N. J., Huk, A. C. (under review). *Binocular integration for behavior in mice*. *Nature Communications*
- Joo, S. J.**, [§]Greer, D. G., Cormack, L. K., & Huk, A. C. (in prep). *Global eye-specific motion signal for three-dimensional motion processing revealed through adaptation*.
- Joo, S. J.**, Boynton, G. M., & Murray, S. O. (in prep). *Functional MRI, ERP, and psychophysical measures show that context effects are orientation tuned and suppressive*.

Conference Presentations

(* denotes talk presentation; [§] denotes work with students under my supervision)

- Choi, V., **Joo, S. J.**, Samonds, J. M., Priebe, N. J., Huk, A. C. (2016). Binocular integration in mouse using stereoscopic cues to guide behavior. Poster presented at the Annual Meeting of the Society for Neuroscience, San Diego, CA, USA.
- [§]Greer, D. G., **Joo, S. J.**, Cormack, L. K., & Huk, A. C. (2016). Global eye-specific motion signal for three-dimensional motion processing revealed through adaptation. Poster presented at the Annual Meeting of the Vision Sciences Society, St. Petersburg, FL, USA.
- Choi, V., **Joo, S. J.**, Priebe, N. J., Huk, A. C. (2016). Binocular integration for behavior in mice. Poster presented at the Annual Meeting of the Vision Sciences Society, St. Petersburg,

FL, USA.

- ***Joo, S. J.**, Cormack, L. K., & Huk, A. C. (2015). Independent processing of disparity-based and velocity-based 3D motion in human visual cortex. Talk presented at the Annual Meeting of the Vision Sciences Society, St. Petersburg, FL, USA.
- Joo, S. J.**, & Huk, A. C. (2014). Behavioral consequences of perceptual decision-making in oculomotor brain structures. Poster presented at the Annual Meeting of the Vision Sciences Society, St. Petersburg, FL, USA.
- Joo, S. J.**, & Murray, S. O. (2013). Contextual effects in human visual cortex depend on surface structure. Poster presented at the Annual Meeting of the Vision Sciences Society, Naples, FL, USA.
- ***Joo, S. J.**, Boynton, G. M., & Murray, S. O. (2012). Large-scale contextual effects in early human visual cortex. Talk presented at the Asia-Pacific Conference on Vision, Incheon, South Korea.
- ***Joo, S. J.**, Boynton, G. M., & Murray, S. O. (2012). Stimulus predictability affects early sensory components of the ERP response. Talk presented at the Annual Meeting of the Vision Sciences Society, Naples, FL, USA.
- Hubert-Wallander, B., Lin, J. Y., **Joo, S. J.**, Murray, S. O., & Boynton, G. M. (2012). Subitizing is resource-limited and not preattentive. Poster presented at the Annual Meeting of the Vision Sciences Society, Naples, FL, USA.
- Lin, J. Y., Hubert-Wallander, B., **Joo, S. J.**, Murray, S. O., & Boynton, G. M. (2012). It's not just gist! Recognition memory for scrambled scenes with limited attentional resources. Poster presented at the Annual Meeting of the Vision Sciences Society, Naples, FL, USA.
- Joo, S. J.**, Boynton, G. M., & Murray, S. O. (2011). Long-range, pattern-dependent contextual effects in early visual cortex. Poster presented at the Annual Meeting of the Vision Sciences Society, Naples, FL, USA.
- Joo, S. J.**, Boynton, G. M., & Murray, S. O. (2010). Contrast adaptation reveals long-range pattern-dependent contextual effects. Poster presented at the Annual Meeting of the Society for Neuroscience, San Diego, CA, USA.
- ***Joo, S. J.**, & Chong, S. C. (2008). The attentional blink does not disrupt computation of the mean size. Talk presented at the Annual Meeting of the Vision Sciences Society, Naples, FL, USA.
- Joo, S. J.**, & Chong, S. C. (2007). Effect of signal strength on the attentional blink. Poster presented at the Annual Meeting of the Vision Sciences Society, Sarasota, FL, USA.

Invited Talks

- 2016. 3. Institute for Learning and Brain Sciences, University of Washington, Seattle, WA, USA
- 2015. 6. Department of Brain and Cognitive Engineering, Korea University, Seoul, Korea
- 2015. 6. Department of Global Biomedical Engineering, Sungkyunkwan University, Suwon Korea
- 2014. 9. Cognitive Neuroscience Seminar, University of Texas, Austin, TX, USA
- 2012. 9. Department of Psychology, University of Minnesota, Minneapolis, MN, USA
- 2012. 9. Center for Perceptual Systems, University of Texas, Austin, TX, USA
- 2012. 7. Institute of Cognitive Sciences, Yonsei University, Seoul, Korea
- 2012. 7. Department of Psychology, Korea University, Seoul, Korea

Teaching Experience

Introduction to Psychology with Dr. Judith McLaughlin
Winter 2010/Winter 2012/Spring 2012, Teaching assistant

Laboratory in Statistical Computation with Dr. Dana Nelson
Autumn 2011, Teaching assistant

Understanding Statistics in Psychology with Dr. Geoffrey Boynton
Autumn 2010, Teaching assistant

Sensation and Perceptual Process with Dr. Ione Fine
Spring 2009, Teaching assistant, Guest lecturer

Information Processing Theory with Dr. Sang Chul Chong
Autumn 2006, Teaching assistant

Introduction to Cognitive Science with Dr. Sang Chul Chong
Spring 2006, Teaching assistant

Professional Activities

Editorial Board

The Korean Journal of Cognitive Science

Ad-hoc reviewer

Cerebral Cortex; Journal of Neurophysiology; Neuroimage; Journal of Vision; Symmetry

Affiliations

Vision Sciences Society; Society for Neuroscience