

# SEOYOUNG AHN

Psychology A135, Stony Brook, NY 11790

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## RESEARCH INTEREST

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Vision, Attention, Computational modeling, Eye tracking

## EDUCATION

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**PhD, Stony Brook University, State University of New York**

*Sept. 2018 - present*

Major in Cognitive Science (specializations in Vision)

Advisor: Gregory Zelinsky

**MA, Seoul National University**

*Sept. 2016 – Aug. 2018*

Major in Psychology (specializations in Psycholinguistics)

Advisor: Sungryong Koh

**BA, Seoul National University**

*Mar. 2011 - Aug. 2016*

Double major in Russian Language and Literature and Psychology

Advisor: Sowon Hahn, Eunji Song

## PUBLICATIONS

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Adeli, H., **Ahn, S.**, & Zelinsky, G. (2021). Recurrent Attention Models with Object-centric Capsule Representation for Multi-object Recognition. arXiv preprint arXiv:2110.04954.

**Ahn, S.**, Zelinsky, G., & Lupyan, G. (in press). Use of superordinate labels yields more robust and human-like visual representations in convolutional neural networks, *Journal of Vision*.

Chen, Y., Yang, Z., **Ahn, S.**, Samaras, D., Hoai, M., & Zelinsky, G. (2021). COCO-Search18 fixation dataset for predicting goal-directed attention control. *Scientific reports*, 11(1), 1-11.

Zelinsky, G. J., Chen, Y., **Ahn, S.**, & Adeli, H. (2020). Changing perspectives on goal-directed attention control: The past, present, and future of modeling fixations during visual search. *Psychology of Learning and Motivation*, pp. 231-286. Elsevier. 2020.

**Ahn, S.**, Kelton, C., Balasubramanian, A., & Zelinsky, G. (2020, June). Towards Predicting Reading Comprehension From Gaze Behavior. In *ACM Symposium on Eye Tracking Research and Applications* (pp. 1-5).

Yang, Z., Huang, L., Chen, Y., Wei, Z., **Ahn, S.**, Zelinsky, G., Samaras, D. & Hoai, M.,(2020). Predicting Goal-directed Human Attention Using Inverse Reinforcement Learning. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition* (pp. 193-202).

Zelinsky, G., Yang, Z., Huang, L., Chen, Y., **Ahn, S.**, Wei, Z., & Hoai, M. (2019). Benchmarking Gaze Prediction for Categorical Visual Search. In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition Workshops*

Kelton, C., Wei, Z., **Ahn, S.**, Balasubramanian, A., Das, S. R., Samaras, D., & Zelinsky, G. (2019, June). Reading detection in real-time. In *Proceedings of the 11th ACM Symposium on Eye Tracking Research & Applications* (p. 43). ACM.

## PRESENTATIONS

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**Ahn, S.,** Zelinsky, G. J., Lupyan, G. (2020). Exploring the effects of linguistic labels on learned visual representations using convolutional neural networks. *Live talk presented at the Annual Meeting of Vision Science Society (VSS), St. Pete Beach, FL. 2020*

**Ahn, S., &** Zelinsky, G. J. (2019). Predicting Mental States from Eye Movements During Reading. *Journal of Vision, 19(10), 127b-127b. Poster presented at the Annual Meeting of Vision Science Society (VSS), St. Pete Beach, FL. 2019*

## HONORS AND AWARDS

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Mar. 2017	<b>Graduate Research Fellowship (2 year)</b> , Seoul National University
Feb. 2016	<b>Undergraduate Best Student Paper</b> , College of Social Science at Seoul National University
Sept. 2015	<b>Undergraduate Research Grant in Social Science</b> , College of Social Science at Seoul National University
Mar. 2011	<b>The Next Century Humanities Scholarship (4 year)</b> , Korean Student Aid Foundation (KOSAF)

## SKILLS

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<b>Modeling and Analysis</b>	Python, R, Matlab, and Mplus
<b>Experiment</b>	Eyelink , Eyelink 1000, Mobile Eye E-prime, Psychopy
<b>Software Tools</b>	MS Office, Latex
<b>Language</b>	Korean, English, Russian
<b>Non-Academic Skills</b>	Ballet

## RESEARCH EXPERIENCE

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<b>Soojinjae Brain Science</b> <i>Research Assistant</i>	Sept. 2016 – Sept. 2017
· Helped develop a screening tool for developmental dyslexia using the Hierarchical Bayesian Item Response Theory (IRT) approach	

## TEACHING EXPERIENCE

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<b>Statistics, Stony Brook University</b> <i>Lab Instructor</i>	Fall 2020
<b>Research and Writing, Stony Brook University</b> <i>Instructor</i>	Summer 2020
<b>Research and Writing, Stony Brook University</b> <i>Lab Instructor</i>	Spring 2020
<b>Introduction to Psychology, Seoul National University</b> <i>Teaching Assistant</i>	Spring 2017, Fall 2017

## REFERENCES

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**Dr. Gregory Zelinsky**  
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**Dr. Sungryong Koh**  
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