# SEOYOUNG AHN

Psychology A135, Stony Brook, NY 11790 seoyoung.ahn@stonybrook.edu

#### RESEARCH INTEREST

Vision, Attention, Computational modeling, Eye tracking

#### **EDUCATION**

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

#### HONORS AND AWARDS

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

### **PUBLICATIONS**

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. (2021). Ahn, S., Zelinsky, G. J., Lupyan, G. (2021). Use of superordinate labels yields more robust and human-like visual representations in convolutional neural networks. Journal of Vision, 21(13), 13-13.

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). 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.

#### TALKS AND POSTER PRESENTATIONS

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

#### TEACHING EXPERIENCE

### Statistics, Stony Brook University

Fall 2020

Lab Instructor

Research and Writing, Stony Brook University

Summer 2020

Instructor

Research and Writing, Stony Brook University

Spring 2020

Lab Instructor

Introduction to Psychology, Seoul National University

Spring 2017, Fall 2017

Teaching Assistant

### PROFESSIONAL ACTIVITIES

### Stony Brook GWISE Python Workshop

Winter 2022

Organizer/Main Instructor

· Organized and instructed python programming for data analysis and visualization affiliated with GWISE (Graduate Women in Science and Engineering) at Stony Brook University

### Sooinjae Brain Science

Sept. 2016 – Sept. 2017

Research Assistant

· Helped develop a screening tool for developmental dyslexia using the Hierarchical Bayesian Item Response Theory (IRT) approach

#### **SKILLS**

Modeling and Analysis Python, R, Matlab, and Mplus

Experiment Eyelink, Eyelink 1000, Mobile Eye E-prime, Psychopy

Software Tools MS Office, Latex

Language Korean, English, Russian

### REFERENCES

## Dr. Gregory Zelinsky

Department of Psychology, Stony Brook University, NY 11790 Phone: +1 (631) 632-7827 E-mail: gregory.zelinsky@stonybrook.edu

### Dr. Sungryong Koh

Department of Psychology, Seoul National University 1, Gwanak-ro, Gwanak-gu, Seoul, Republic of Korea Phone: +82 10-7306-7151 E-mail: koh@snu.ac.kr