Jaeseo Lim

CONTACT INFORMATION

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EDUCATION

Seoul National University Sep 2019 –
Ph.D Student in Cognitive Science
Advisor: Prof. Jooyong Park
GPA: 4.3/4.3

Seoul National University Sep 2017 – Aug 2019
Advisor: Prof. Jooyong Park
M.S. in Cognitive Science
GPA: 4.3/4.3

Yonsei University Mar 2011 – Aug 2017
B.S. in Psychology
GPA: 3.94/4.3

B.S. in English Language and Literature
GPA: 4.07/4.3

CURRENT RESEARCH INTERESTS

I am a cognitive science researcher interested in issues of how students learn complex concepts introduced in instructional texts. One line of my studies examines ways of improving students learning. This has included demonstrating how students can learn better by active-learning, understanding why discussing is an effective instructional method from the students perspective. More recently, I has investigated a method of effective learning. To achieve these goals, I use psychological experiment, computational modeling, and machine learning techniques.

JOURNAL ARTICLES

Shin, Y., **Lim, J.**, Kim, Y., Seo, D-G., & Ihm, J (2022). Effects of virtual body-representation on motor skill learning. *Scientific Report*.

Park, J. A., Song, M. A., **Lim, J.**, & Park, J. (2022). Two Faces of Grit-Perseverance: Is It Always Good to Exert Grit? *Journal of Cognitive Psychology*, 1-12.

Lim, J., Ko, H., Park, J., & Ihm, J (2022). Effect of active learning and online discussions on the academic performances of dental students. *BMC Medical Education, 22*(1), 1-9.

Lim, J., Ko, H., Yang, J. W., Kim, S., Lee, S., Chun, M. S., ... & Park, J. (2019). Active learning through discussion: ICAP framework for education in health professions. *BMC Medical Education, 19*(1), 1-8.

Kim, S., Yang, J. W., **Lim, J.**, Lee, S., Ihm, J., & Park, J. (2021). The impact of writing on academic performance for medical students. *BMC Medical Education, 21*(1), 1-8.

CONFERENCE PAPERS

Son, S., **Lim, J.**, Jang, Y., LEE, J., & Zhang, B. T. Learning to Write with Coherence From Negative Examples. ArXiv:2209.10922

Lee, J. and **Lim, J*.**, Park, J., & Kim, C. (2022). Emotion Evaluator: Expanding the Affective Lexicon with Neural Network Model. *In Proceedings of the 44th Annual Meeting of the Cognitive Science Society, July, 2022. (co-first author*)*

Lim, J., Yang, J. W., Lee, J., & Park, J (2022). The Way to Better Learning Online: Using Online Discussions in College Classes During COVID-19. *The 16th International Conference of the Learning Sciences (ICLS), June, 2022.*

Song, M. H.,**Lim, J**., & Park, J. (2022). The Effect of Weekly Writing and Peer Reviewing Upon Students Writing Competence. *The 16th International Conference of the Learning Sciences*

(ICLS), June, 2022.

Jo, H*. and **Lim, J*.** & Zhang, B. T. (2021). Devil's Advocate: Novel Boosting Ensemble Method from Psychological Findings for Text Classification. *The 2021 Conference on Empirical Methods in Natural Language Processing (EMNLP), 2021. (co-first author*)*

Lim, J*. and Jo, H*., Zhang, B. T. and Park, J. (2021). Passive Versus Active: Frameworks of Active Learning for Linking Humans to Machines. *In Proceedings of the 43rd Annual Meeting of the Cognitive Science Society, July, 2021. (co-first author*)*

Lim, J., Jo, H., Zhang, B. T., & Park, J. (2020). Human-Like Active Learning: Machines Simulating the Human Learning Process. *The 34th Conference on Neural Information Processing Systems (NeurIPS 2020) Workshop on Babymind (**Spotlight Talks**)*

Lazaro, M. J. S., **Lim, J.**, kim, S. H., & Yun, M. H. (2019). Wearable Technologies: Acceptance Model for Smartwatch Adoption among Older Adults. *In Proceedings of the 22nd International Conference on Human-Computer Interaction.*

Kang, G. C., **Lim, J.**, & Zhang, B. T. (2019). Dual Attention Networks for Visual Reference Resolution in Visual Dialog. *Conference on Empirical Methods in Natural Language Processing (EMNLP).*

Kim, T., Kwak, M., Yang, S. H.,**Lim, J.**, & Zhang, B. T. (2019, October). WithDorm: Dormitory Solution for Linking Roommates.*In Proceedings of the 21st International Conference on Human-Computer Interaction with Mobile Devices and Services (pp. 1-6).*

Lim, J., Shin, B., & Park, J. (2019). Discussions: A Medium that Promotes Learning. *In Proceedings of the 83rd Annual Convention of the Japanese Psychological Association (JPA).*

Cho, S., **Lim, J.**, Hickey, C., & Zhang, B. T. (2019). Simulating Problem Difficulty in Arithmetic Cognition Through Dynamic Connectionist Models. *In Proceedings of the 17th International Conference on Cognitive Modeling (ICCM 2019).*

Cho, S., **Lim, J.**, Hickey, C., & Zhang, B. T. (2019). Problem Difficulty in Arithmetic Cognition: Humans and Connectionist Models. *In Proceedings of the 41st Annual Meeting of the Cognitive Science Society.*

Kang, G. C., **Lim, J.**, & Zhang, B. T. (2019). Sequential Attention-based Networks for Visual Reference Resolution in Visual Dialog. *In Proceedings of the 37st information Technology and Industry Prospects (iTIP 2019).*

Kang, G. C., **Lim, J.**, & Zhang, B. T. (2019). Dual Attention Networks for Visual Reference Resolution in Visual Dialog *Conference on Computer Vision and Pattern Recognition (CVPR 2019) VQA and Dialog Workshop.*

Heo, Y. J., On, K. W., Choi, S., **Lim, J.**, Kim, J., Ryu, J. K., ... & Zhang, B. T. (2019). Constructing Hierarchical Q&A Datasets for Video Story Understanding. *AAAI Spring Symposium Series.*

Lim, J., & Park, J. (2019). When Are Discussions More Effective: After a Lecture or Self-Study? *In Proceedings of the 8th Annual International Conference on Cognitive and Behavioral Psychology (CBP).*

MANUSCRIPTS UNDER REVIEW

Lim, J., & Park, J. (under review). Active Pre-discussion Activity Enhances Discussion Effect upon Learning.

Song, M. A., **Lim, J.**, & Park, J. (under review). The Effect of Peer Assessment on Writing Ability in University Classes.

TALKS & PRESENTATION

Passive vs. Active. Frameworks of Active Learning for Linking Humans to Machines
CogSci 2022 local meetup

Optimizing Online Discussions to Promote Learning for Medical Students
The 33rd Association for Psychological Science (APS) Annual Convention

Human-Like Active Learning: Machines Simulating the Human Learning Process
The 34th Conference on Neural Information Processing Systems (NeurIPS 2020) Workshop on Babymind. **(Spotlight Talks)**

Effect of Active Pre-Learning Activities on Humans and Machines
The 42nd Annual Meeting of the Cognitive Science Society (CogSci 2020). **(Poster Presentation)**

Comparing Learning Outcomes After Different Pre-Learning Activities
The 42nd Annual Meeting of the Cognitive Science Society (CogSci 2020). **(Poster Presentation)**

Human-like Memory Architecture for Visual Reference Resolution
The 12nd International Conference on Cognitive Science (ICCS 2019). **(Poster Presentation)**

How to Enhance Discussion Effect on Learning
The 31st Association for Psychological Science (APS) Annual Convention. **(Poster Presentation)**

Grit Can Hurt You
The 31st Association for Psychological Science (APS) Annual Convention. **(Poster Presentation)**

How Learning Method Affect Learning Outcome: Focusing on Discussions in Learning
The 72nd Annual conference on Korean psychological association. **(Poster Presentation)**

HONORS & AWARDS

Youlchon Scholarship for AI Young Researcher Nov 2022

SNU Scholarship for Outstanding Ph.D. thesis May 2022

SNU Scholarship for Academic Excellence Spring 2020

SNU Scholarship for Academic Excellence Fall 2019

Visual Dialog Challenge 3rd Place, CVPR 2019 Jun 2019
More info at https://visualdialog.org/challenge/2019

SNU Graduate Scholarship for Basic Science Research Spring 2019

SNU Graduate Scholarship for Basic Science Research Spring 2018

B.A. from Yonsei with summa cum laude Fall 2017

Yonsei Undergraduate Scholarship for Academic Excellence Spring 2011– Fall 2017

Honorable Mention Award from Korean Institute of Intelligent Systems Spring 2016

RESEARCH PROJECTS

Ph.D. Student Research Grant Jun 2021 –
Basic Science Research Program through the National Research Foundation of Korea (NRF) funded by the Ministry of Education.

Principal Investigator

- Working with key stakeholders to define requirements and delivery milestones for research.
- Investigated psychological and behavioral factors associated with attaining and enhancing learning.
- Assisted with empirical research-based data collections and educational technologies initiatives specifically tailored to diverse groups of participants.
- Researched and intervened strategies for understanding factors that create differential access to and quality of learning, as well as the, experiences of those in real-life classrooms.
- Trained undergraduate research assistants in qualitative and quantitative research methods and transcribing audio-recorded interviews.

Meta-learning-based efficient learning techniques for drone AI Jan 2022 –
Source Technology Development Project for Artificial Intelligence

Researcher

- Working with key stakeholders to define requirements and delivery milestones for research.
- Provide additional support to researchers with educational or special needs.
- Supporting integration activities via the creation and delivery of technical documentation for research.

AI Data for Life Safety Sep 2020 –
Seoul National University College of Medicine's Project on Medical AI Training Data Construction.

Researcher

- Working with key stakeholders to define requirements and delivery milestones for research.
- Provide additional support to researchers with educational or special needs.
- Supporting integration activities via the creation and delivery of technical documentation for research.

Babymind Apr 2020 –
Babymind is a research project which aims to build infant-mimic neuro-cognitive AI technologies. Our project consists of four sub-teams that are responsible for knowledge integration, vision-audio, language-emotion, and robot-behavior. We are planning to experiment our project in real and virtual-reality-based environments.

Researcher

- Assist the principal investigator to deliver engaging, informative activities which support the relevant research.
- Provide one-on one support to researcher across a wide variety of psychological domain.
- Provide additional support to undergraduate students with special educational needs or those who Korean is not their first language.
- Monitor individual undergraduate student performance, highlighting any students that appear to require additional academic support to the project manager.

Video Turing Test (VTT) Mar 2018 – Jan 2020

The Video Turing Test desires to test a machines ability of intelligent behavior in regards to observing and understanding video input and thereby its video intelligence. A machine capable of this task would prove human-like video understanding capabilities that could open the world of AI to a whole new possibilities in human-like long-term adaptive learning.

Researcher

- Assist the project manager to deliver engaging, informative activities which support the relevant research.
- Provide one-on one support to researcher across a wide variety of psychological domain.
- Provide additional support to undergraduate students with special educational needs or those who Korean is not their first language.

The Competency Modeling for the Selection of Dental Students Oct 2018 - Sep 2019

The study aims to create a model that will help select dentistry students through the approach of behavioral dentistry.

Researcher

- Assist the principal investigator to deliver engaging, informative activities which support the relevant research.
- Provide one-on one support to researcher across a wide variety of psychological domain.
- Structure competency models for selection of dental students.
- Translate a questionnaire for Korean, and Plan an experiment.

Analysis for College Syllabus to Improve Classes Feb - May 2018

The study analyzes the syllabus on all lectures at Seoul National University. Through a survey conducted by students and professors, we would like to draw policy suggestions on how to improve the teaching style.

Project Manager

- Working with key stakeholders to define requirements for research.
- Collect and analyze all syllabuses within a university.
- Investigated psychological factors associated with attaining propose of research.
- Assisted with empirical research-based data collections and educational technologies initiatives.
- Researched and intervened strategies for understanding factors that create differential access to and quality of learning outcomes, as well as the, syllabus of a college.
- Trained undergraduate research assistants in qualitative and quantitative research methods and transcribing audio-recorded interviews.

EXTRA CURRICULAR ACTIVITIES

Teaching Assistant Spring 2019

Introduction to Cognitive Science

- Assist the professor to deliver engaging, informative classroom activities which support the relevant curriculum.
- Provide one-on one support to students across a wide variety of subject.
- Provide additional support to students with special educational needs or those who Korean is not their first language.
- Monitor individual student performance, highlighting any students that appear to require additional academic support to the professor.
- Organize and maintain the classroom inventory including, learning materials and resources.

Teaching Assistant Fall 2019
Methodology for Cognitive Science

- Assist the professor to deliver engaging, informative classroom activities which support the relevant curriculum.
- Provide one-on one support to students across a wide variety of subject.
- Deliver and supervise small group activities, accurately assessing their impact on individual students
- Provide additional support to students with special educational needs or those who Korean is not their first language.
- Monitor individual student performance, highlighting any students that appear to require additional academic support to the professor.
- Organize and maintain the classroom inventory including, learning materials and resources.
- Produce accurate records and reports when requested by the wider staff team.

Teaching Assistant Spring 2020
Introduction to Cognitive Science

- Lecture students on recent trends in psychological research.
- Assist the professor to deliver engaging, informative classroom activities which support the relevant curriculum.
- Provide one-on one support to students across a wide variety of subject.
- Provide additional support to students with special educational needs or those who Korean is not their first language.
- Monitor individual student performance, highlighting any students that appear to require additional academic support to the professor.
- Organize and maintain the classroom inventory including, learning materials and resources.

Teaching Assistant Fall 2020
Methodology for Cognitive Science

- Lecture students on recent trends in psychological research.
- Present a recently published my own paper to students.
- Assist the professor to deliver engaging, informative classroom activities which support the relevant curriculum.
- Provide one-on one support to students across a wide variety of subject.
- Deliver and supervise small group activities, accurately assessing their impact on individual students
- Monitor individual student performance, highlighting any students that appear to require additional academic support to the professor.
- Organize and maintain the classroom inventory including, learning materials and resources.
- Produce accurate records and reports when requested by the wider staff team.