

# Heeryung Choi

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| CONTACT<br>INFORMATION          | MIT Building E40-369,<br>Massachusetts Institute of Technology,<br>1 Amherst St, Cambridge, MA<br>US 02142  | heeryung@mit.edu      |
| EDUCATION                       | <b>Ph.D. in information, University of Michigan,<br/>School of Information, Ann Arbor, MI, USA</b><br>Ph.D. in Information with Data Science certificate<br>Dissertation title: SRLA: Self-Regulated Learning Analytics<br>Dissertation committee: Prof. Christopher Brooks (advisor), Prof. Phil Winne,<br>Prof. Stephanie Teasley, Prof. Andy Krumm | <b>2016 - 2022</b>    |
|                                 | <b>M.S. in Cognitive Science, Seoul National University,<br/>Interdisciplinary Program in Cognitive Science, Seoul, South Korea</b><br>M.S. in Cognitive Science<br>Advisor: Joonhwan Lee   | <b>2014 - 2016</b>    |
|                                 | <b>Seoul National University,<br/>School of Education, Seoul, South Korea</b><br>B.A. in English Education (Summa Cum Laude)  | <b>2009 - 2014</b>    |
| PROFESSIONAL<br>WORK EXPERIENCE | <b>Digital Learning Postdoctoral Associate,<br/>Massachusetts Institute of Technology,<br/>Center for Transportation and Logistics</b><br>Researching and supporting MITx MicroMasters program  | <b>2022 - present</b> |
| HONORS AND<br>AWARDS            | MIT Integrated Learning Initiative (ili) Learning Effectiveness Grant   | <b>June, 2022</b>     |
|                                 | Outstanding graduate student instructor of the year   | <b>2020 - 2021</b>    |
|                                 | Samsung Scholarship for PhD program   | <b>2016 - 2020</b>    |
|                                 | Korean National Research Scholarship  | <b>2015</b>           |
|                                 | Graduated with honors (Summa Cum Laude)   | <b>2014</b>           |
|                                 | Seoul National University Merit Scholarship   | <b>2011 - 2013</b>    |
| TEACHING<br>EXPERIENCE          | Instructor  | <b>2021</b>           |
|                                 | SIADS 505: Data Manipulation (online, $\geq 20$ students)   |                       |
|                                 | Teaching Assistant for Data Science Graduate Courses  | <b>2018-2021</b>      |
|                                 | SIADS 521: Visual Exploration of Data (online, $\geq 240$ students)   |                       |
|                                 | SIADS 505: Data Manipulation (online, $\geq 270$ students)  |                       |
|                                 | SI 630: Natural Language Processing: Algorithms and People (residential, $\geq 70$ students)  |                       |
|                                 | SI 671: Data Mining (residential, $\geq 50$ students)   |                       |

**Peer-reviewed Journal Papers**

**Choi, H.**, Jovanovic, J., Poquet, S., Brooks, C., Joksimovic, S., Williams, J. J. (2023). The benefit of reflection prompts encouraging learning with hints in programming education. *The Internet and Higher Education*.

Brooks, C., Quintana, R. M., **Choi, H.**, Quintana, C., NeCamp, T., Gardner, J. (2021). Towards culturally relevant personalization at scale: Experiments with data science learners. *International Journal of Artificial Intelligence in Education*, 1-22.

**Peer-reviewed Archival Conference Proceedings**

**Choi, H.**, Winne, P. H., Brooks, C., Li, W., Shedden, K. (2023). Logs or Self-Reports? Misalignment Between Behavioral Trace Data and Surveys When Modeling Learner Achievement Goal Orientation. In *Proceedings of the 13th International Conference on Learning Analytics & Knowledge (LAK)*.

**Choi, H.**, Mills, C., Brooks, C., Doherty, S., Singh, A. (2022). Design recommendations for using textual aids in data-science programming courses. In *Proceedings of the 53rd ACM Technical Symposium on Computer Science Education*.

**Choi, H.**, Dowell, N., Brooks, C., Teasley, S. (2019). Social comparison in MOOCs: Perceived SES, opinion, and message formality. In *Proceedings of the 9th International Conference on Learning Analytics & Knowledge (LAK)* (pp. 160-169).

Yan, W., Dowell, N., Holman, C., Welsh, S. S., **Choi, H.**, Brooks, C. (2019). Exploring learner engagement patterns in teach-outs using topic, sentiment and on-topiciness to reflect on pedagogy. In *Proceedings of the 9th International Conference on Learning Analytics & Knowledge (LAK)* (pp. 180-184).

Lin, Y., Dowell, N., Godfrey, A., **Choi, H.**, Brooks, C. (2019). Modeling gender dynamics in intra and interpersonal interactions during online collaborative learning. In *Proceedings of the 9th International Conference on Learning Analytics & Knowledge (LAK)* (pp. 431-435).

**Book Chapter**

**Choi, H.**, Winne, P. H., Brooks, C. (in press). Proposal and critiques of measuring motivational constructs using state-revealing trace data. In *Unobtrusive Observations of Learning in Digital Environments - Examining Behavior, Cognition, Emotion, Metacognition and Social Processes Using Learning Analytics* (Springer).

**Workshops and Posters**

**Choi, H.**, Brooks, C., Hayward, C., Kitto, K., Gasevic, D., Pardo, A., Winne, W., Heffernan, N. (2021). Engineering Learning Analytics Technology Environments (ELATE): Understanding iteration between data and theory, and design and deployment, *Proceedings of the 11th international conference on learning analytics & knowledge*

**Choi, H.**, Dowell, N., Brooks, C., Teasley, S. (2019). Social comparison in MOOCs: Perceived SES, opinion, and message formality. In *Proceedings of the 9th International Conference on Learning Analytics & Knowledge* (pp. 160-169).

**Choi, H.**, Wang, Z., Brooks, C., Collins-Thompson, K., Reed, B. G., Fitch, D. (2017). Social

work in the classroom? A tool to evaluate topical relevance in student writing. In *Proceedings of the 10th International Conference on Educational Data Mining* (p. 386).

**Choi, H.**, Brooks, C., Collins-Thompson, K. (2017). What does student writing tell us about their thinking on social justice?. In *Proceedings of the Seventh International Learning Analytics & Knowledge Conference* (pp. 594-595).

Lee, J. S., **Choi, H.**, Lee, J. (2015). TalkingCane: Designing interactive white cane for visually impaired people's bus usage. In *Proceedings of the 17th International Conference on Human-Computer Interaction with Mobile Devices and Services Adjunct* (pp. 668-673).

#### INVITED TALKS

**Choi, H.** (2023). Survey or Trace data?: Steps to Understand self-regulated learning better, *Syracuse University, School of Education*.

**Choi, H.** (2023). Meta-LAD: A Dashboard Supporting Self-Regulated Learning, *Massachusetts Institute of Technology, Open Learning, MITx Digital Learning Lab*.

**Choi, H.** (2022). Interviewed by Prof. Rene Kizilcec for Cornell University course INFO 4100 Learning Analytics.

**Choi, H.** (2021). Using Data to Understand Self-Regulated Learning, *Massachusetts Institute of Technology, Center for Transportation and Logistics*.

**Choi, H.** (2021). Engineering Learning Analytics Technology Environments (ELATE), *University of Michigan, Center of Academic Innovation*.

#### SERVICE

##### Program Committee

|  |                     |
|--|---------------------|
| ACM Learning Analytics and Knowledge Conference (LAK)  | <b>2020-present</b> |
| Artificial Intelligence in Education Conference (AIED) | <b>2020-present</b> |
| Learning with MOOCs (LWMOOCs)                          | <b>2023-present</b> |

##### Peer-reviewing (Journals)

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|--|---------------------|
| International Journal of Artificial Intelligence in Education (IJAIED) | <b>2020-present</b> |
| Journal of Learning Analytics (JLA)                                    | <b>2019-present</b> |
| British Journal of Educational Technology (BJET)                       | <b>2022-present</b> |

##### Peer-reviewing (Conferences)

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|--|---------------------|
| ACM Learning Analytics and Knowledge Conference (LAK)  | <b>2016-present</b> |
| Artificial Intelligence in Education Conference (AIED) | <b>2020-present</b> |
| Learning with MOOCs (LWMOOCs)                          | <b>2023-present</b> |

##### Reviewing (Grant)

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| Society for Learning Analytics Research (SoLAR) |                     |
| Early Career Research (ECR) Grant               | <b>2023-present</b> |

##### Member of Society for Learning Analytics Research (SoLAR)

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| Diversity and inclusion working group | <b>2019-present</b> |
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##### Member of Doctoral Executive Committee (DEC) of

|   |             |
|---|-------------|
| University of Michigan, School of Information | <b>2017</b> |
|---|-------------|

## REFERENCES

Christopher Brooks, Ph.D.  
Assistant Professor,  
School of Information,  
University of Michigan  
broosch@umich.edu

Phil Winne, Ph.D.  
Distinguished SFU Professor,  
Faculty of Education,  
Simon Fraser University  
winne@sfu.ca

Stephanie Teasley, Ph.D.  
Research Professor,  
School of Information,  
University of Michigan  
steasley@umich.edu