HEERYUNG CHOI

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RESEARCH INTERESTS

Educational Data Mining   Learning Analytics

EDUCATION

University of Michigan, Michigan, United States   **2016 - Present**

PhD in Information
- Advisor: Christopher Brooks

Seoul National University, Seoul, South Korea   **2014 - 2016**

Master of Science in Cognitive Science (expected graduation date: Aug. 2016)
- Advisor: Joonhwan Lee

Seoul National University, Seoul, South Korea   **2009 - 2014**

Bachelor of Arts in English Education
- Overall GPA: 3.99 / 4.3 (Summa Cum Laude); Upper Division GPA: 4.06 / 4.3

RESEARCH EXPERIENCES

Research Assistant for Neolab Pen Computing Project   **2014 - 2016**
- Evaluated user interfaces of collaborative software for the classroom, Neolab N School Note.
- Conducted semi-structured interviews to grasp how the pen computing technology can enhance interactive learning processes.

Research Assistant for Kinetic Typography Project   **2014 - 2016**
- Established a text-processing algorithm for an automated kinetic typography engine (KIWEE).
- Performed semi-structured interviews and experiments in order to evaluate the validity of the KIWEE system.

TEACHING EXPERIENCES

Teaching Assistant for Information Visualization (211.724A-001)   **Fall 2015**
- Offered general support and one-to-one assistance for graduate students.
- Prepared data for student visualization assignment.
- Assisted the professor in the management of students.

Teaching Assistant for HCI Theory and Practice (2114.408A-001)   **Spring 2015**
- Showed undergraduate students how to use eye-tracker for their final projects.
- Helped the professor in the management of students.

PUBLICATIONS

Conference Proceedings

Heeryung Choi, Nia Dowell, Christopher Brooks. 2018. Social comparison theory as applied to MOOC student writing: constructs for opinion and ability, *in ICLS '18: the Thirteenth International Conference of the Learning Sciences.*

Heeryung Choi, Zijian Wang, Christopher Brooks, Kevyn Collins-Thompson, Beth Glover Reed, Dale Fitch. 2017. Social work in the classroom? A tool to evaluate topical relevance in student writing, *in EDM '17: the Tenth International Conference on Educational Data Mining.*

Heeryung Choi, Christopher Brooks, Kevyn Collins-Thompson. 2017. What does student writing tell us about their thinking on social justice?, *in LAK '17: the Seventh International Learning Analytics Knowledge Conference.*

Je Seok Lee, **Heeryung Choi**, Joonhwan Lee. 2015. TalkingCane: Designing Interactive White Cane for Visually Impaired People's Bus Usage, *in MobileHCI 2015: ACM Conference on Human-Computer Interaction with Mobile Devices and Services.*

Joonhwan Lee, Donghwan Kim, Inho Won, Jieun Wee, Yaena Jang, Sooyeon Jang, **Heeryung Choi**. 2015. Sentence-level Kinetic Typography Generating System, in *HCI Korea 2015, in cooperation with ACM and SIGCHI.*
> **Translated Abstract**: Kinetic typography (KT) enables users to better convey emotions in text-based communication. In this research, we propose a sentence-level KT system that generates and assigns effects to the text input. We believe that our system improves the utilization of KT for broader applications. The system consists of 5 steps, and we focused on creating an algorithm for automated processing and layout of text, as in a sentence.

Joonhwan Lee, Donghwan Kim, Inho Won, Jieun Wee, Yaena Jang, Sooyeon Jang, **Heeryung Choi**. 2014. Evaluating System-Generated Kinetic Typography Effects for Sentence-Level Text Layout, in *The Korean Institute of Information Scientists and Engineers 2014.*
> **Translated Abstract**: Kinetic typography effectively allows texts, which lack non-verbal evidence, to show emotion through movement when used in communication. Previous studies have focused on word-for-word modules, whereas this study focuses on the capability and usefulness of sentences. Specifically, an automated algorithm was created for this study, wherein sentences were given animated effects using an appropriate layout. Tests were performed using samples created with the prototype. The results confirmed that sentence-based kinetic typography is appropriate in conveying emotion.

Joonhwan Lee, Donghwan Kim, Inho Won, Jieun Wee, Yaena Jang, Sooyeon Jang, **Heeryung Choi**. 2014. The Architecture of Automatic Kinetic Typography Effects Generating System, in *Korea Multimedia Society 2014.*
> **Translated Abstract**: Kinetic typography can be used to reveal emotion successfully in a mediated communication environment. Previous kinetic typography research limits animated effects to word-for-word modules. To support various text-based communication, there is a need for a sentence-based system. Therefore, this study suggests a new algorithm and system wherein an animated effect for kinetic typography is created for sentences.

PATENTS | Automatic Kinetic Typography Effects Generating System for Expressing Emotions. Joonhwan Lee, Donghwan Kim, Jieun Wee, Yaena Jang, Sooyeon Jang, **Heeryung Choi**. (Pending)

HONORS AND AWARDS

Samsung Scholarship   **2016 - Present**
- Tuition and living costs covered for PhD studies ($50 K per year, for 5 years)

National Research Scholarship   **2015**
- Tuition covered (for one year)

Summa Cum Laude   **2014**
- Graduated with honors (summa cum laude)

- Achieved third-highest GPA of all students in the program

Seoul National University Scholarship   **2011 - 2013 (3 semesters)**

- Merit-based scholarship

ACTIVITIES &
SERVICES

Reviewer

- CHI 2015 Conference

REFERENCES

Christopher Brooks, Ph.D.
Research Assistant Professor,
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Associate Professor,
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