Jaeyoon Song

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EDUCATION

Seoul National University, Seoul, Korea, Republic of — Mar 2016 – Present

- B.A.A., Business Administration
- Computer Science and Engineering (Minor)

RESEARCH EXPERIENCE

KAIST Interaction Lab, Korea Advanced Institute of Science and Technology — Dec 2018 – Feb 2019, Jun 2019 – Aug 2019

- Undergraduate Research Intern
  - Supervisor: Prof. Juho Kim
  - Project: SolutionChat - Real-time Moderator Support for Chat-based Structured Discussion
  - Project: SuggestBot - Crowdsourcing Evidence for Debate using Amazon Mechanical Turk
  - Project: Credibility Assessment and Critical Thinking through Microtasks while Reading

Human-Computer Interaction Lab, Seoul National University — Jun 2018 – Aug 2018

- Undergraduate Research Intern
  - Supervisor: Prof. Jinwook Seo
  - Project: SoundGlance - Briefing the Glanceable Cues of Web Pages for Screen Reader Users

INTERESTS

Crowdsourcing, Online Discussion, Computer-Supported Cooperative Work, Future of Work.

PUBLICATIONS

JOURNALS

[1] J. Song and C. Kim, **What Is Needed for the Sustainable Success of Open Source Software Projects: Efficiency Analysis of Commit Production Process via Git**, *Sustainability* (SCIE/SSCI), vol. 10, no. 9, Aug 2018.

What is needed for open source software projects to be efficient? Linus' Law celebrates the 'many eyeballs' as a key advantage of open source projects. Nevertheless, when it comes to efficiency, 'many eyeballs' could be a double-bladed sword. By mining and analyzing the data collected from GitHub open source projects, this paper performed data envelopment analysis (DEA) on 34 open source projects.

POSTERS

[2] J. Song, K. Choe, J. Jo, and J. Seo, **SoundGlance: Briefing the Glanceable Cues of Web Pages for Screen Reader Users,** *ACM CHI Conference on Human Factors in Computing Systems (CHI 2019 Late Breaking Work)*, ACM, New York, NY, USA, May 2019.

Although screen readers can convey the textual information or structural properties of a web page, they cannot deliver its overall impression. Such a limitation hinders blind web users from obtaining an overview of the website, which non-blind people can do in a short time. SoundGlance is a novel application that briefly delivers an auditory summary of web pages. SoundGlance supports the screen reader users by converting the important glanceable cues of the pages into sound. To automatically extract the glanceable cues, we trained a convolutional neural network (CNN) with the annotations on the screenshots of 39 web pages.

RESEARCH PROJECTS

PAPERS UNDER REVIEW

[3] S. Lee, J. Song, K. Choe, S. Park, J. Kim, J. Kim, and E. Ko, **SolutionChat: Real-time Moderator Support for Chat-based Structured Discussion**, submitted to *ACM CHI Conference on Human Factors in Computing Systems 2020 (CHI 2020).*

Online chat is an emerging channel for discussing community problems. It is common practice for communities to assign dedicated moderators to maintain a structured discussion and enhance the problem-solving experience. However, due to the synchronous nature of online chat, moderators face a high managerial overhead in tasks like discussion stage management, opinion summarization, and consensus-building support. SolutionChat is a system that assists moderators with facilitating a structured discussion for community problem-solving. With SolutionChat, we envision untrained moderators to effectively facilitate chat-based discussions of important community matters.

[4] D. Shin, J. Song, S. Song, J. Park, J. Lee and S. Jun, **TalkingBoogie: Collaborative Mobile AAC System for Non-verbal Children with Developmental Disabilities and Their Caregivers**, submitted to *ACM CHI Conference on Human Factors in Computing Systems 2020 (CHI 2020).*

Augmentative and alternative communication (AAC) technologies are widely used to help non-verbal children enable communication. For AAC-aided communication to be successful, caregivers should support children with consistent intervention strategies in various settings. TalkingBoogie supports caregivers to effectively collaborate with one another and create a shared understanding of intervention strategies.

WORK IN PROGRESS

[5] **Credibility Assessment and Critical Thinking through Microtasks while Reading**, advised by Prof. Juho Kim

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RELEVANT COURSEWORK

Seminar in Organizational Behavior, Dept. of Business Administration 2019 Spring

- Graduate-level course that required reading 40 journal articles in total, writing a research proposal every week, and reviewing the proposals of other students during the class discussion. (Final grade: A0)

Organizational Psychology, Dept. of Psychology 2019 Spring

- Major theories and issues in the field of organizational psychology. (Final grade: A+)

HCI and Communication, Dept. of Communication 2018 Fall

- Topics in robot journalism, human-robot interaction, and social computing. (Final grade: A+)

Human-Computer Interaction, Dept. of Computer Science and Engineering, 2018 Spring

- Introduction to HCI and information visualization. (Final grade: A+)

AWARDS & SCHOLARSHIPS

AWARDS

- Student-directed education, Outstanding Research Award — Mar 2019
  Awarded by Faculty of Liberal Education, Seoul National University
- Samsung AI Challenge, Top Ten Finalist — Sep 2018
  Awarded by Samsung Research
- Undergraduate Research Presentation Competition, Grand Prize — May 2018
  Awarded by Korean Production & Operations Management Society (KOPOMS).
- Annual Likelion Ideathon, Top Ten Winner — Jul 2017
  Awarded $1,000 AWS credits by Likelion and Amazon Korea.
- School Service Development Tournament, Winner — Feb 2017
  Awarded by SNULife–a Seoul National University student community.

SCHOLARSHIPS

- Yangyoung Foundation Scholarship — 2018 – Present
  Based on both merit and need.
- Samsung Convergence Software Course Scholarship — Jun 2018
  Scholarship for successfully finishing the Samsung Convergence Software Course (SCSC) program.
- Eminence Scholarship (Full), Seoul National University — 2016 – 2017
  Merit-based.

ADDITIONAL EXPERIENCE

WORK EXPERIENCE AND CLUB ACTIVITIES

Likelion, Web Programming Club, Seoul National University — Mar 2016 – Jun 2018

- In Likelion, I tutored peer students on basic web programming.

Chartmetric, Intern, Front-end Engineering — Aug 2017 – Nov 2017

- Chartmetric is a startup based in Palo Alto, providing tools to track, measure, and analyze music big data.

WEB PROJECTS

- Information Visualization (https://jaeyoon.io/dt4c) — Oct 2018 – Nov 2018
- Visualization of Korean Independence Movement (https://jaeyoon.io/infovis) — May 2018 – Jun 2018
- Startup Website (https://www.bigpearl.io) — Jan 2018 – Feb 2018
- The Cube (https://jaeyoon.io/cube) — Oct 2017 – Nov 2017
- Shashagungun (http://shashagungun.com) — Dec 2016 – Feb 2017
- SNU Computer Study Club Website (https://scsc.snu.ac.kr) — Dec 2015 – Jan 2016

SKILLS

LANGUAGES

- Korean: Native proficiency.
- English: Full professional proficiency.
  - GRE - Verbal 164 / Quantitative 170 / Writing 4.5 (Oct 2019)
- Japanese: Intermediate (reading); basic (speaking, writing).
  - JLPT - N2 (Jan 2014)

PROGRAMMING

- **JavaScript** (React.js, TweenLite.js, D3.js, jQuery, ...)
- Ruby on Rails, SASS/SCSS
- Python, Java, C++

OTHERS

- Sketch App, Adobe Photoshop.
- LaTeX, Microsoft Word, Microsoft Excel, Microsoft PowerPoint.

[*CV compiled on 2019-10-25*]