

Hyeok Kim

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Research Interests

- Human-computer Interaction
- Data visualization, between-device visualization, narrative visualization
- Design research, societal problems

Education

Sep. 2019 - Present

Northwestern University, Evanston, IL. US.

Ph.D. Student in Computer Science, McCormick School of Engineering

- Advisor: Jessica Hullman

Sep. 2016 - Feb. 2019

Seoul National University, Seoul, Korea

Master of Arts in Communication, College of Social Science

- Thesis Topic: *A Design Space for the Transition of News Articles with Data Visualizations from Large to Small Screen*
- Committee: Hwajung Hong (chair), Joonhwan Lee, and Youn-ah Kang
- Advisor: Joonhwan Lee

Mar. 2010 - Aug. 2016

Seoul National University, Seoul Korea

Bachelor of Arts in Linguistics, College of Humanities, *Cum Laude*

- Student-Designed Minor in Computational and Statistical Linguistics
- Theses
 - *Analysis of Gendered Vocabulary in Korean Language Textbooks for Marriage Migrant Women*
 - *Evaluating Informativeness of Korean-Language Comments on Webtoon [Online Comics]*

Publications

Conference

- 2019 Hyeok Kim, Haesoo Kim, Youngjin Kwon, Hansol Jang, Soomin Lee, & Joonhwan Lee (2019). **The Implementation of MiRO, a Media-as-Place Computer Game**. In Companion Publication of the 2019 on Designing Interactive Systems Conference 2019 Companion (pp. 219-223).

- 2018 Wookjae Maeng, Hyeok Kim, Junhee Woo, Youngjin Huh, Seo-young Lee, Jeewon Choi, Sangwook Lee, Jinsu Eun, Kungjin Lee, & Joonhwan Lee. **Implications for the Design of Sexual Harassment Prevention System for Online Games**. Proceedings of HCI Korea (HCIK). 2018.

Honors and Awards

- Oct. 2017 **Grand Award**: The 5th Human Rights Research Projects Contest, Seoul National University Human Rights Center
- Research topic: *Design Implications for Sexual Harassment Prevention System in Online Game*
- Jan. 2017 **Honorable Mention**: Undergraduate Independent Study Program, Faculty of Liberal Education, Seoul National University
- Research topic: *Evaluating Informativeness of Korean-Language Comments on Webtoon [Online Comics]*

Scholarships

- Sep. 2018 - Feb. 2019 **Media Fellowship**, Seoul National University (Appx. \$2,600)
- Jan. 2017 - Aug. 2018 **Lecture & Research Scholarship**, Seoul National University (Appx. \$15,000)
- 2014 **Synyang Scholarship**, Synyang Cultural Foundation (Appx. \$4,400)
- 2010 **Superior Academic Performance**, Seoul National University (Appx. \$500)

Research & Professional Experiences

- Sep. 2018 - Present **Undergraduate Affairs Staff**, The Interdisciplinary Program for Information Science and Technology, Seoul National University
- Director: Prof. Joonhwan Lee
 - Vice Director: Prof. Hwajung Hong
 - Roles: student and instructor affairs, courses, and finance
- Aug. 2018 - Present **Assistant System for Sex Crime Survivors**
- PI: Prof. Joonhwan Lee
 - Funded by the Consortium of Police and the Ministry of Science and ICT of South Korea
 - Roles:
 - A designer and full-stack developer of a chatbot web application for support-seeking of sex crime survivors
 - An organizer for participatory design sessions

- Mar. - Aug. 2018 **SNU CardNewsBot** (A slide news generation system)
- Role: Visualization and Front-end developer
 - PI: Prof. Joonhwan Lee
 - Funded by the Korean Institute of Information and Communications Technology Promotion (IITP)
 - Roles:
 - A designer and front-end developer of a responsive web application with card-based interface.
 - A developer of a ‘card generation system’ with JSON-based formalization. This system renders card slides from data inputs (layout and content information) in JSON format. This system involves maps of South Korea and graphs.
- Jun. 2017- Sep. 2017 **Utopia (Energy Education App)**, Korean Environmental Education Center
- Roles: Director, Front-end developer
 - Features
 - An editor and viewer for online comics with background music controlled by scrolling.
 - Implemented an energy diary by which users can enter and monitor their energy usage with visualization.
- Mar. 2015 – Feb. 2017 **Supervisor of Undergraduate Social Works**, The Institute for Global Social Responsibility of Seoul National University
- Consulted undergraduate students about their online mentoring activities both individually and in group.
 - Consulted field managers in local schools whose students participated in the program.
 - Designed a prototype for online mentoring service.
 - Managed communication between service directors and developers.
- Dec. 2016 - Jun. 2017 **SNU FactCheck Center** (Institute of Communication Research at Seoul National University)
- Role: a front-end developer
 - Implemented the ‘Fact Indicator’ which resembles a gauge and dynamically shows possible ‘Fact Indices’ for an article.
- Dec. 2016 - Jun. 2017 **Mike Project**
- Roles: a visualization author and full-stack developer
 - *How Much is My Labor?:* a visual explorer of minimum wage and product prices by denoting product prices with work hours based on minimum wage.
 - *How Much Do I Emit?:* a visual explorer of greenhouse gas emissions and average income level by mapping unit GHG emissions to unit income.

- *What Percent are You Male?:* a visual explorer that calculates the income quantile of one's opposite gender based on her/his income.
- Short Visuals: visual articles regarding gender, labor, and environmental issues.
- Independent publication
 - Minimum Wage Index 2015-2016
- Funding received
 - **Meet + Share**, Seoul NPO Center (Appx. \$1,300 / 5 months)

Talks and Presentations

- Jan. 2019 **Workshop**, HCI Korea 2019
- Topic: *Mobile Data Visualization Paper-Prototyping*
- 16 Nov. 2018 **Presentation**, Annual Joint-Symposium of SNU-UT-NCCU
- Topic: *How to present data visualization articles on mobile devices?*
 - Venue: National Chengchi University, Taipei, Taiwan.
- 8 Oct. 2018 **Special Lecture**, Seoul National University
- Education program: a paper-prototyping workshop for transitioning the desktop version of data visualization to a small screen (mobile) version
 - Class: Design Thinking and Communication
 - Class Instructor: Prof. Hwajung Hong
- 24 Nov. 2018 **Presentation**, Annual Joint-Symposium of SNU-UT
- Topic: Design implications for an in-game sexual harassment prevention system.
 - Venue: University of Tokyo, Tokyo, Japan.
- 7 Dec. 2016 **Special Lecture**, Seoul NPO Center
- Title: Data Analysis Workshop: K-Pop Lyrics Word Cloud
 - Audience: general audience
 - Education program: a step-by-step programming session including basic morpheme analysis and word cloud generation (python with notebook).
- 10 Oct. 2015 **Special Lecture**, Seoul NPO Center
- Title: Storytelling about the World with Data
 - Audience: general audience
 - Introduced the process through which I collected, processed, and visualized data for "How Much is My Labor?"

Teaching Assistantship Experiences

- Fall, 2018 **Data Journalism**, Seoul National University
Teaching Assistant
- Journalism Field Practice**, Seoul National University
Teaching Assistant
- Media Field Practice**, Seoul National University
Teaching Assistant
- Spring, 2018 **HCI Theory and Practice**, Seoul National University
Teaching Assistant
- Spring, 2017 **Seminar in Communication Research Methods: Computational Communication Science**, Seoul National University
Teaching Assistant

Leadership and Volunteer Experiences

- Sep. 2012 – Dec. 2015 **SNU Mentoring Mentor**, Seoul National University Institute for Global Social Responsibility
- Consulted local secondary school students about life management and school activities via online.
- Oct. 2014 - Jan. 2015 & May. - Aug. 2015 **Overseas Volunteering Program Student Supervisor**, Seoul National University Institute for Global Social Responsibility
- Location: Nam Din, Vietnam
 - Organized and supervised the general programs.
 - Conducted field research with local coordinators.
- May. - Aug. 2014 **Overseas Volunteering Program**, Seoul National University Institute for Global Social Responsibility
- Location: Nam Din, Vietnam
 - Implemented entertainment and hygiene education program for children.
 - Assisted medical services for older adults.

Media

- 11 Mar. 2015 **“It Takes 44 Minutes in Korea, 33 Minutes in Japan, and 24 Minutes in Singapore to Buy a BigMac with Minimum Wage ”**, on Dong-A Daily (National Newspaper)
- Available on <http://news.donga.com/3/all/20150311/70055360/1>
 - Describes “How Much is My Labor?” project.

Computer Skills

Programming Language

JavaScript (Node.js) and Python

Web Spec Preferences

MongoDB + Express + Vue.js + Material/Bootstrap + jQuery

Visualization and Statistic Tools

D3.js, Tableau, R, and SPSS

Creativity Tools

Adobe Photoshop, Illustrator, InDesign, and Sketch

Language

Native: Korean

Fluent: English, Japanese