

## INTERESTS

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- Human-Computer Interaction, Human-Centered AI, Information Visualization
- Generative Models, Latent Manipulation, High-Dimensional Data

## EDUCATION

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- **Seoul National University** Seoul, Republic of Korea  
*M.S. in Computer Science and Engineering (Advisor: Prof. Jinwook Seo)* *Sep 2019—Aug 2021*
- **Hanyang University** Seoul, Republic of Korea  
*B.S. in Mathematics, Minor in Industrial Engineering* *Mar 2014—Aug 2019*

## PUBLICATIONS

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### • Peer-reviewed publications

5. **Hyung-Kwon Ko\***, Subin An\*, Gwanmo Park, Seung Kwon Kim, Daesik Kim, Bohyoung Kim, Jaemin Jo, Jinwook Seo, “We-toon: A Communication Support System between Writers and Artists in Collaborative Webtoon Sketch Revision,” *Proceedings of the 35th ACM User Interface Software and Technology Symposium (UIST 2022)*, to appear.
4. Hyeon Jeon\*, **Hyung-Kwon Ko\***, Soohyun Lee, Jaemin Jo, Jinwook Seo, “Uniform Manifold Approximation with Two-phase Optimization,” *Proceedings of IEEE VIS 2022 (Short)*, to appear.
3. Hyeon Jeon, **Hyung-Kwon Ko**, Jaemin Jo, Youngtaek Kim, and Jinwook Seo, “Measuring and Explaining the Inter-Cluster Reliability of Multidimensional Projections,” *IEEE Transactions on Visualization and Computer Graphics (TVCG)*, Vol. 28, No. 1, pp. 551-561, Jan. 2022.
2. Seokweon Jung, Kiroong Choe, Seokhyeon Park, **Hyung-Kwon Ko**, Youngtaek Kim, and Jinwook Seo, “Mixed-Initiative Approach to Extract Data from Pictures of Medical Invoice,” *IEEE Pacific Visualization Symposium (PacificVis)*, pp. 111-115, 2021.
1. **Hyung-Kwon Ko**, Jaemin Jo, and Jinwook Seo, “Progressive Uniform Manifold Approximation and Projection,” *EuroVis 2020: Eurographics/IEEE-VGTC Symposium on Visualization*, pp. 133-137. 2020.

### • Preprints & Publications in progress

3. Hyungyu Shin, Yoonjoo Lee, **Hyung-Kwon Ko**, Juho Kim, “Enabling Prototyping of AI-infused UIs with Task-level Specifications,” *(In Progress)*, 2022.
2. **Hyung-Kwon Ko**, Gwanmo Park, Hyeon Jeon, Jaemin Jo, Jinwook Seo, “Understanding the Expectation and Concern for Text-to-Image Generative Models,” *(In Progress)*, 2022.
1. Hyeon Jeon, Michael Aupetit, Soohyun Lee, **Hyung-Kwon Ko**, Youngtaek Kim, Jinwook Seo, “Distortion-Aware Brushing for Interactive Cluster Analysis in Multidimensional Projections,” *arXiv preprint arXiv:2201.06379 (Under Review)*, 2022.

## EXPERIENCE

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- **KAIST Interaction Lab (KIXLAB)** Daejeon, Republic of Korea  
*Researcher (Advisor: Prof. Juho Kim)* *Jun 2022—Present*
- **Naver Webtoon Corp.** Seongnam, Republic of Korea  
*AI Research Scientist, Webtoon AI* *Oct 2021—Jun 2022*  
*AI Research Intern, Webtoon AI* *Apr 2021—Aug 2021*

- **Human-Computer Interaction Lab**  
*Research Intern (Advisor: Prof. Jinwook Seo)* Seoul, Republic of Korea  
Mar 2019—Aug 2019
- **LG Electronics**  
*Research Intern, CTO division* Seoul, Republic of Korea  
Jan 2019—Feb 2019
- **Wesleyquest Inc.**  
*Research Associate* Seoul, Republic of Korea  
Jun 2018—Aug 2018

## AWARDS

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- **3rd place in Big Contest**  
*National Information Society Agency and Korea Bigdata Forum* Oct 2018
- **2nd Place in Artificial Intelligence Novel Competition**  
*KT and KOCCA* Aug 2018
- **2nd Place in Academical team research**  
*Natural Science college of Hanyang University* Nov 2017

## PROGRAMMING SKILLS

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- **Languages:** Python (PyTorch), JavaScript (React, D3, Svelte), C/C++, R
- **Technologies & Tools:** Git, L<sup>A</sup>T<sub>E</sub>X, Vim, AWS EC2

## SERVICES & VOLUNTEER EXPERIENCE

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- **External reviewer**  
*IEEE PacificVis (paper)* 2020-2021
- **The Actors Theatre Workshop**  
*Nonprofit organization, Intern* New York, NY, USA  
Mar 2016—Aug 2016
- **Republic of Korea Army**  
*11th Division, Administrative Clerk* Gangwon, Republic of Korea  
Jun 2011—Mar 2013