

INTERESTS

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

EDUCATION

- **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

- **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)*, 2022.
- [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**

- [2] **Hyung-Kwon Ko**, Gwanmo Park, Hyeon Jeon, Jaemin Jo, Jinwook Seo, “Understanding the Expectation and Concern for Large-scale 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

- **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

- **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

- **Languages:** Python (PyTorch), JavaScript (React, D3, Svelte), C/C++, R
- **Technologies & Tools:** Git, L^AT_EX, Vim, AWS EC2

SERVICES & VOLUNTEER EXPERIENCE

- **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