

KWON KO

Stanford University
299 Campus Drive
Stanford, CA 94305
kwonko@stanford.edu
<https://hyungkwonko.info>

About

Kwon Ko is a Computer Science Ph.D. student at Stanford University, interested in the emerging integration of human cognition and AI via brain-computer interfaces (BCIs). In *augmented cognition*, AI operates as a direct neural extension, enhancing memory, problem-solving, and perception while blurring the boundary between biological and artificial intelligence. In *human-as-platform*, humans provide the cognitive framework—attention, intention, and value constraints—within which AI agents operate. He studied physics (BS, dropout), math (BS), industrial engineering (BS, minor), and computer science (MS). Previously, he served in the ROK Army and worked at broadcasting company, nonprofit organization, consulting firm, manufacturing company, big tech, and IT startup. He lives by [his creed](#).

Education

2024 – present	Stanford University , Stanford, CA Ph.D. in Computer Science (Advisor: Dr. Shaul Druckmann) Research Topic: Brain-Computer Interface
2019 – 2021	Seoul National University , Seoul, Korea M.S. in Computer Science and Engineering (Advisor: Dr. Jinwook Seo) Research Topic: Human-Computer Interaction
2014 – 2019	Hanyang University , Seoul, Korea B.S. in Mathematics

Publications

CONFERENCE PROCEEDINGS

- c8 Kim, N. W., Ko, K., Myers, G., Bach, B. (2024).
ChatGPT in Data Visualization Education: A Student Perspective.
VL/HCC 2024. 12 pages. 33.3% acceptance rate (21/63).
- c7 Ko, K., Jeon, H., Park, G., Kim, D. H., Kim, N. W., Kim, J., Seo, J. (2024).
Natural Language Dataset Generation Framework for Visualizations Powered by Large Language Models.
CHI 2024. 22 pages. 26.3% acceptance rate (1,060/4,028).
- c6 Jeon, H., Cho, A., Jang, J., Lee, S., Hyun, J., Ko, K., Jo, J., Seo, J. (2023).
Zadu: A Python Library for Evaluating the Reliability of Dimensionality Reduction Embeddings.
VIS 2023. 5 pages. 33.7% acceptance rate (51/151).
- c5 Ko, K., Park, G., Jeon, H., Jo, J., Kim, J., Seo, J. (2023).
Large-scale Text-to-Image Generation Models for Visual Artists' Creative Works.
IUI 2023. 15 pages. 24.1% acceptance rate (66/274).
- c4 Ko, K.*, An, S.*, Park, G., Kim, S.K., Kim, D., Kim, B., Jo, J., Seo, J. (2022).
We-toon: A Communication Support System between Writers and Artists in Collaborative Webtoon Sketch Revision.
UIST 2022. 14 pages. 26.3% acceptance rate (98/372).

- c3 Jeon, H.*, Ko, K.*, Lee, S., Jo, J., Seo, J. (2022).
Uniform Manifold Approximation with Two-phase Optimization.
 VIS 2022. 5 pages. 31.7% acceptance rate (33/104).
- c2 Jung, S., Choe, K., Park, S., Ko, K., Seo, J. (2021).
Mixed-Initiative Approach to Extract Data from Pictures of Medical Invoice.
 PacificVis 2021. 5 pages. 43.3% acceptance rate (13/30).
- c1 Ko, K., Jo, J., Seo, J. (2020).
Progressive Uniform Manifold Approximation and Projection.
 EuroVis 2020. 5 pages. 45.7% acceptance rate (32/70).

JOURNAL ARTICLES

- j3 Jeon, H., Aupetit, M., Lee, S., Ko, K., Kim, Y., Quadri, G. J., Seo, J. (2025).
Distortion-aware Brushing for Reliable Cluster Analysis in Multidimensional Projections.
 TVCG (Journal Track). 18 pages.
- j2 Jeon, H., Ko, K., Lee, S., Hyun, J., Yang, T., Go, G., Jo, J., Seo, J. (2025).
UMATO: Bridging Local and Global Structures for Reliable Visual Analytics with Dimensionality Reduction.
 TVCG (Journal Track). 18 pages.
- j1 Jeon, H., Ko, K., Jo, J., Kim, Y., Seo, J. (2021).
Measuring and Explaining the Inter-Cluster Reliability of Multidimensional Projections.
 TVCG (VIS 2021). 12 pages. 24.9% acceptance rate (110/441).

WORKSHOP PAPERS

- w2 Ko, K., Jeon, H., Park, G., Kim, D. H., Kim, N. W., Kim, J., Seo, J. (2023).
A Vega-Lite Dataset and Natural Language Generation Pipeline with Large Language Models.
 VIS 2023 NIVIZ Workshop: Exploring Research Opportunities for NL, Text, and Data Visualization.
- w1 Ko, K., Son, K., Jin, H., Choi, Y., Chen, X. (2023).
Moderating Customer Inquiries and Responses to Alleviate Stress and Reduce Emotional Dissonance of Customer Service Representatives.
 CHI 2023 Workshop on Generative AI and HCI.

PREPRINTS & PUBLICATIONS IN PROGRESS

- p1 Ko, K., Jin, H. (2025).
As we May Merge: Rise of the Human Platform.
 Work in Progress.

* denotes equal contributions.

Experience

- 06/2025 – 09/2025 **Microsoft Research**, Redmond, WA
 Research Intern (w/ Dr. Nathalie Riche, Dr. Nic Marquardt)
- 05/2024 – 09/2024 **SkillWave, Inc.**, Remote
 Research Engineer (w/ Dr. Juho Kim, Dr. Matt Beane) (Client: OpenAI, BP plc)

10/2023 – 07/2024	DataMaze Lab (University of Michigan) , Remote Researcher (w/ Dr. Eytan Adar, Dr. Eric Gilbert)
06/2022 – 11/2022	KIXLAB (KAIST) , Daejeon, Korea Researcher (w/ Dr. Juho Kim)
10/2021 – 06/2022	Naver Webtoon Corp. , Seongnam, Korea AI Researcher, Webtoon AI
04/2021 – 09/2021	Naver Webtoon Corp. , Seongnam, Korea AI Research Intern, Webtoon AI
03/2019 – 08/2019	HCI Lab (Seoul National University) , Seoul, Korea Research Intern (w/ Dr. Jinwook Seo)
01/2019 – 02/2019	LG Electronics Inc. , Seoul, Korea Research Intern, CTO Division
06/2018 – 08/2018	Wesleyquest Inc. , Seoul, Korea Research Associate

Honors and Awards

2025 – 2028	MBCT Student Member (Travel & Research funds, \$ 1,500+ USD), Stanford University
2024	Fulbright Scholarship (Fellowship for Ph.D. studies), US & ROK Government
2023	ACM Travel Grants (Travel support for IUI ‘23, \$980 USD), ACM SIGCHI
2022	Gary Marsden Travel Awards (Travel support for UIST ‘22, \$2,800 USD), ACM SIGCHI
2018	Big Data Contest (3 rd Place, \$900 USD), NIA and Korea Big Data Forum
2018	AI Novel Writing Competition (2 nd Place, \$18,000 USD), KT Corporation and KOCCA
2014 – 2018	Merit-based Scholarship (6 semesters, 50% tuition), Hanyang University
2017	Academic Research Competition (2 nd Place, \$180 USD), Hanyang University

Invited Talks and Seminars

2. **Conducting ‘Good’ HCI Research by Asking Important Questions and Learning Together**
 - Seoul National University, HCI Lab. Seoul, Korea (Apr 2024)
 - Sungkyunkwan University, Interactive Data Computing Lab. Suwon, Korea (Mar 2024)
1. **Large-scale Text-to-Image Generation Models for Visual Artists’ Creative Works**
 - Shandong University, Interactive Data Exploration System Lab. Online (Jan 2023)

Academic Services

PAPER REVIEWING	ACM CHI ('23–'26), UIST ('24), CHI LBW ('23, '25), C&C ('23) IEEE PacificVis ('20–'21)
STUDENT VOLUNTEERING	ACM UIST ('22), IUI ('23)

Press Coverage

Nov 2022 Aug 2018	The Road to Becoming a Published Researcher , IEEE Computer Society Writing Novels on Its Own... AI Contests Human Creativity , KBS (Korean)
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