# Kwon Ko

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### **About**

Kwon Ko is a Ph.D. student at Stanford University, focusing on Human-Computer Interaction, Artificial Intelligence, and Visualization. He is eager to identify important problems across diverse domains, and innovate our lives using technology. He strives to synchronize his ambitions with societal ethos. He is not interested in money, but people and how they function within capitalism. He prefers not to draw a strict boundary between academia and industry.

# **Education**

2024 – present	Stanford University, Stanford, CA Ph.D. in Computer Science
2019 – 2021	Seoul National University, Seoul, Korea M.S. in Computer Science and Engineering (Advisor: Dr. Jinwook Seo)
2014 – 2019	Hanyang University, Seoul, Korea B.S. in Mathematics

# **Publications**

## Conference Proceedings

- c8 Kim, N. W., <u>Ko, K.</u>, 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).
- 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).
- 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

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 NLVIZ 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 Jeon, H., Aupetit, M., Lee, S., Ko, K., Kim, Y., Seo, J. (2022).

Distortion-Aware Brushing for Interactive Cluster Analysis in Multidimensional Projections.

Arxiv Preprint.

# **Experience**

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

<sup>\*</sup> denotes equal contributions.

Research Associate

# **Honors and Awards**

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 <sup>rd</sup> Place, \$900 USD), NIA and Korea Big Data Forum
2018	AI Novel Writing Competition (2 <sup>nd</sup> Place, \$18,000 USD), KT Corporation and KOCCA
2014 - 2018	Merit-based Scholarship (6 semesters, 50% tuition), Hanyang University
2017	Academic Research Competition (2 <sup>nd</sup> 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 ACM CHI ('23-'24), UIST ('24), CHI LBW ('23), C&C ('23)

Reviewing IEEE PacificVis ('20–'21)

STUDENT ACM UIST ('22), IUI ('23)

Volunteering

# **Press Coverage**

Nov2022The Road to Becoming a Published Researcher, IEEE Computer SocietyAug2018Writing Novels on Its Own... AI Contests Human Creativity, KBS (Korean)