Jina Kim

EDUCATION University of Minnesota, Minneapolis, USA

Sep. 2021 - Present

Ph.D. in Computer Science Advisor: Professor Yao-Yi Chiang

Carnegie Mellon University, Pittsburgh, USA

Jan. 2020 - Jul. 2020

Visiting Scholar in Language Technologies Institute

Project Course Mentor: Jeffrey Gennari

Sungkyunkwan University, Seoul, Republic of Korea

Mar. 2019 - Feb. 2021

M.Sc. in Interaction Science Advisor: Professor Eunil Park

Thesis Title: A Human-Centered Machine Learning Approach for Mental Health in Social

Media

Hansung University, Seoul, Republic of Korea

Mar. 2015 - Feb. 2019

B.S. in Computer Engineering

Advisors: Professor Kitae Hwang and Professor Inhwan Jung

PUBLICATIONS

* = co-corresponding author, ** = equal contribution

Journal Articles

J1. Understanding social resistance to determine the future of Internet of Things (IoT) services.

Kim, J., & Park, E. (2022).

Behaviour & Information Technology, ISSN: 1362-3001 (SSCI, JCR 2019 IF=1.781). [link]

J2. Between Comments and Repeat Visit: Capturing Repeat Visitors with a Hybrid Approach. Kim, J.**, Jang, Y.**, Bae, K., Oh, S., Jeong, N. J., Park, E., Han, J., & del Pobil, A. P. (2021).

Data Technologies and Applications, 55(4), 542-557. ISSN: 2514-9288 (SSCI, JCR 2019 IF=0.704). [link]

J3. What books will be your bestseller? A machine learning approach with Amazon Kindle. Lee, S., Ji, H., **Kim, J.***, & Park, E. (2021).

The Electronic Library, 39(1), 137-151. ISSN: 0264-0473 (SSCI, JCR 2019 IF=0.792). [link]

J4. Machine Learning for Mental Health in Social Media: Bibliometric Study

Kim, J., Lee, D., & Park, E. (2021).

Journal of Medical Internet Research, 23(3), e24870. ISSN: 1438-8871 (SCIE, JCR 2019 IF=5.034, Q1 in *Medical Informatics*). [link]

J5. A deep hybrid learning model for customer repurchase behavior.

Kim, J., Ji, H., Oh, S., Hwang, S., Park, E., & del Pobil, A. P. (2021). *Journal of Retailing and Consumer Services*, 59, 102381. ISSN: 0969-6989 (SSCI, JCR 2018 IF=3.585, Q2 in *Business*). [link]

J6. A deep learning model for detecting mental illness from user content on social media. **Kim, J.**, Lee, J., Park, E., & Han, J. (2020).

Scientific Reports, 10, 11846, ISSN: 2045-2322 (SCIE, JCR 2019 IF=3.998, Q1 in Multidisciplinary Sciences). [link] [dataset]

J7. Can AI be a content creator? Effects of content creators and information delivery methods on the psychology of content consumers.

Kim, J., Shin, S., Bae, K., Oh, S., Park, E. & del Pobil, A. P. (2020). Telematics and Informatics, 55, 101452, ISSN: 0736-5853 (SSCI, JCR 2019 IF=4.139, Q1 in *Information Science & Library Science*). [link]

J8. Who will be your next customer: A machine learning approach to customer return visits in airline services.

Hwang, S., Kim, J., Park, E., & Kwon, S. J. (2020). Journal of Business Research, 121, 121-126, ISSN: 0148-2963 (SSCI, JCR 2019 IF=4.874, Q1 in Business). [link]

J9. Cross-cultural Comparison of Interactive Streaming Services: Evidence from Twitch. Oh, S., Kim, J., Ji, H., Park, E., Han, J., Ko, M., & Lee, M. (2020). Telematics and Informatics, 55, 101434, ISSN: 0736-5853 (SSCI, JCR 2019 IF=4.139, Q1 in Information Science & Library Science). [link]

J10. Determinants of customer satisfaction with airline services: An analysis of customer feedback big data.

Park, E., Jang, Y., Kim, J., Jeong N. J., Bae, K., & del Pobil, A. P. (2019). Journal of Retailing and Consumer Services, 51, 186-190, ISSN: 0969-6989 (SSCI, JCR 2018 IF=3.585, Q2 in *Business*). [link]

J11. Beyond coolness: Predicting the technology adoption of interactive wearable devices. Kim, J., & Park, E. (2019).

Journal of Retailing and Consumer Services, 49, 114-119, ISSN: 0969-6989 (SSCI, JCR 2018 IF=3.585, Q2 in *Business*). [link]

Conference & Symposium Proceedings

C1. Who will Subscribe to My Streaming Channel?: The Case of Twitch.

Kim, J., Bae, K., Park, E., & del Pobil, A. P. (2019). In Conference Companion Publication of the 2019 on Computer Supported Cooperative Work and Social Computing (pp. 247-251). ACM. [link] [poster]

WORKSHOPS

PRESENTATIONS & P1. Identifying Street Name Evolution in Semantic, Temporal, and Geographic Spaces. Kim, J.**, Namgung, M.**, Uhl, J H., Burghardt, K., Chiang, Y.-Y., Leyk, S., & Lerman, K. (2022). Spatial Humanities 2022. [link]

> P2. Machines Reading Maps: unlocking historical maps with machine learning and Semantic Web technologies.

Chiang, Y.-Y., Holmes-Wong, D., Kim, J., Li, Z., McDonough, K., Simon, R., & Vitale, V. (2022).

Spatial Humanities 2022. [link]

P3. Generating Geospatial Linked Data from Text Labels on Historical Maps.

Kim, J. (2022).

UCGIS Symposium 2022.

W1. Reading and Linking Place: Text on Historical Maps.

Kim, J., & Chiang, Y.-Y. (2022). UCGIS Symposium 2022. [workshop]

RESEARCH **PROJECTS**

Machines Reading Maps, National Endowment for the Humanities

- Research Assistant Sep. 2021 - Present

- Making historical scanned maps easily discoverable and accessible
- Developing semantic type recommendation API and automatic entity linking module on mapKurator pipeline

Developing a Deep Learning Model for Detecting High-Risk Mental Health Group, The Individual Research Grants Program, National Research Foundation of Korea

- Research Associate (in Charge)

Mar. 2020 - Feb. 2021

- Analyzed mental health-related social media data, developed deep learning models for text classification, and published 2 journal articles as a first author

Designing an Analysis Model on Abnormal Statements in Thermal Pipelines Monitoring Procedures, The Commissioned Research, Korea Institute of Civil Engineering and Building Technology (KICT)

- Research Associate

Jul. 2020 - Nov. 2020

- Analyzed image segmentation techniques on crack detection, proposed U-Net based architectures, and submitted journal article as a second author

Developing a Deep Learning Model for Predicting Service Reuse, The Individual Research Grants Program, National Research Foundation of Korea

- Research Associate (in Charge)

Mar. 2019 - Dec. 2019

- Analyzed large-scale data obtained from online services, developed deep learning models to predict customers' service reuse, and published 3 journal articles

Big Data Research for Artificial Intelligence Applications, ETRI Jun. 2019 - Nov. 2019

- Research Associate
- Analyzed chat messages in one of the live streaming platforms, predicted whether viewers have paid subscriptions based on their chat messages
- Implemented web application using Flask, Python web framework, and uploaded project tutorial video

Theorizing and Analyzing User Resistance Behavior: An Application of Big Data Approaches, Samsung Research Grants Program, Samsung and Sungkyunkwan University

- Research Associate

Jul. 2019 - Dec. 2019

- Carried out statistical analysis to investigate users' resistance behavior on IoT services, and published journal article as a first author

Development of the Appliance with Messaging Technology underlying Hyper-Connected Society, Seoul Business Agency and Hansung University

- Undergraduate Research Intern

Nov. 2017 - Oct. 2018

- Developed real time location-based notification service prototype of both Android app and web application using Java, and published domestic conference paper

Work Experience Raon Data

Mar. 2021 - Jun. 2021

AI scientist intern

Electronics and Telecommunications Research Institute (ETRI) Jun. 2018 - Aug. 2018 Undergraduate summer intern, investigated research on multiple conversational agents in IoT research section

TEACHING EXPERIENCE

University of Minnesota, Minneapolis, USA

Teaching Assistant, Undergraduate Course

Fall 2022

- CSCI 1133: Introduction to Computing and Programming Concepts

Sungkyunkwan University, Seoul, Republic of Korea

Head Teaching Assistant, Undergraduate Course

Fall 2020

- AAI 3020: Capstone Design Project for Artificial Intelligence

Teaching Assistant, Undergraduate Course

Fall 2019

- AAI 2007: Introduction to Algorithms (in English)

Tutor, Undergraduate Tutoring Program Spring 2019 Hansung University, Seoul, Republic of Korea Tutor, Undergraduate Tutoring Program Spring 2018, Fall 2017, Spring 2017, Spring 2016 1st Prize in Student Poster Competition June 2022 **ACADEMIC** Honors & 2022 UCGIS Symposium **SCHOLARSHIPS** 2nd Prize in Global Training Program Achievement Award Nov. 2021 Ministry of Science and ICT, Korea 2nd Prize in Fake-EmoReact Challenge Jun. 2021 SocialNLP @ NAACL '21 The Global Young Scientists Summit (GYSS) 2021 Jan. 2021 National Research Foundation, Singapore Best Research Award (1st) Mar. 2020 College of Computing, Sungkyunkwan University Full Scholarship for Intensive Artificial Intelligence Program in CMU Jan. 2020 Institute for Information and Communications Technology Promotion (IITP) under the Ministry of Science and ICT Graduate Scholarship (\$12,000) 2019 - 2020 Sungkyunkwan University **Undergraduate Distinguished Achievement Award** Feb. 2019 Hansung University Academic Excellence Scholarship (\$2,100; 1/2 Tuition) Fall 2017, Fall 2018 Department of Computer Engineering, Hansung University 1st Prize in 2018 Capstone Design Jun. 2018 Department of Computer Engineering, Hansung University - Project Title: An MQTT based Real Time LBS System Design for Vehicles and Pedestrians 2nd Prize in 15th Embedded Software Contest Dec. 2017 **ETRI**

- Project Title: Drone Streaming Solution Using Raspberry PI 3

Proceeding Chair
- SDM '23

SERVICES

Program Committee

- CIKM '22 Demo Track

Reviewer

- SIGSPATIAL '21, '22
- Scientific Reports
- AIME '22
- Behaviour & Information Technology

Student Volunteer

- SIGSPATIAL '21, '22
- ICML '20

Service Appointments

- Board of Director & Web Master, Minnesota Association for Korean Americans (MAKA)
- Vice President & Web Master, Minnesota Korean Graduate Students Association (MKGSA)

REFERENCES

Yao-Yi Chiang, Ph.D. (e-mail: yaoyi@umn.edu; phone: +1-213-924-7106)

- Associate Professor,

Department of Computer Science & Engineering, University of Minnesota, USA

Eunil Park, Ph.D. (e-mail: eunilpark@skku.edu; phone: +82-2-740-1864)

- Assistant Professor,

Department of Interaction Science & Department of Applied Artificial Intelligence, Sungkyunkwan University, Republic of Korea

Jinyoung Han, Ph.D. (e-mail: jinyounghan@skku.edu; phone: +82-2-740-1797)

- Assistant Professor,

Department of Applied Artificial Intelligence, Sungkyunkwan University, Republic of Korea

Kitae Hwang, Ph.D. (e-mail: calafk@hansung.ac.kr; phone: +82-2-760-4300)

- Professor,

Department of Computer Engineering, Hansung University, Republic of Korea