

# Meeyoung Cha

## CONTACT

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## INTERESTS

Data science and computational modeling. Finding beauty in data patterns, understanding the propagation of socially relevant information, solving challenging social science problems (e.g., misinformation, frauds, hate speech, poverty mapping, long-tail content), and AI-boosted basic science (climate downscaling, drug discovery, neuroscience).

## POSITIONS

**Institute for Basic Science (IBS)**, Daejeon, Korea  
Chief Investigator 2019.01 - present  
**Facebook**, Menlo Park, USA  
Visiting Professor 2015.08 – 2016.08  
**Korea Advanced Institute of Science and Technology (KAIST)**, Daejeon, Korea  
Associate Professor, School of Computing 2017.08 – present  
Adjunct Professor, Department of Brain and Cognitive Science 2022.09 – present  
Adjunct Professor, Web Science Division 2010.05 – 2017.07  
Associate Professor, Graduate School of Culture Technology 2014.03 – 2017.07  
Assistant Professor, Graduate School of Culture Technology 2010.05 – 2014.02  
**Max Planck Institute for Software Systems (MPI-SWS)**, Saarbruecken, Germany  
Visiting Professor 2013.07 – 2013.08  
Postdoctoral Researcher 2008.01 – 2010.05

## HONORS

### Program Chair and Editor

Int'l Conference on Web and Social Media (ICWSM), co-Editor-in-Chief 2021  
The Web Conference (WWW) Web and Society Track, Proceedings 2021  
The Web Conference (WWW) BIG Event 2020  
Int'l Conference on Web and Social Media (ICWSM) 2015

### Keynotes

ACM Conference on Fairness, Accountability, and Transparency (FAccT) 2022  
Int'l Conference on Computational Social Science (IC2S2) 2021  
Conference for Truth and Trust Online (TTO) 2020  
Network Science Society's winter conference series (NetSci-X) 2020  
World Customs Organization (WCO) Policy Commission and Conference 2019  
Conference on Empirical Methods in Natural Language Processing (EMNLP) 2019  
Conf Series on Advances in Social Network Analysis and Mining (ASONAM) 2017  
Int'l Conference on Social Informatics (SocInfo) 2016

### Awards

Test-of-Time Awards at ACM IMC 2022, AAAI ICWSM 2020  
Minister of Science and ICT Award in Korea 2022  
Young Information Scientist Award in Korea 2019  
Best Paper Awards at ICWSM 2012, ACM IMC 2007

## CITATIONS

Google Scholar 19,064 citations (as of December 21, 2022)  
<https://scholar.google.com/citations?user=iFlnVCoAAAAJhl=enoi=ao>  
Papers with 1000 or more citations: 5  
Papers with 100 or more citations: 26  
H-index: 43, i10-index: 79

**EDUCATION**

Ph.D. in Computer Science, KAIST 2008  
 ◇ Thesis Topic: Network Support for Emerging Multimedia Streaming Services  
 ◇ Advisor: Sue Moon  
 M.S. in Computer Science, KAIST 2004  
 B.S. in Computer Science, KAIST (*With Honors*) 2002

**PUBLICATION SUMMARY****Artificial Intelligence**

- ◇ Poverty Mapping: *KDD 2020, AAAI 2020, AAAI 2022*
- ◇ Anomaly Detection: *TKDD 2023, KDD 2020, AAAI 2022, TKDE 2022*
- ◇ Social Listening: *WWW 2018, CIKM 2015*
- ◇ Market Data: *TKDE 2020, PeerJ 2017*
- ◇ Representation Learning: *ECCV 2022, ECCV 2020, CVPR 2021*
- ◇ AI Ethics: *CSCW 2020, CHI 2021, CSCW 2022*

**Information Propagation**

- ◇ Misinformation: *CACM 2020, AAAI 2019, PLoS One 2017, IJCAI 2016, ICDM 2013, HKS Misinfo 2020, WWW 2021, PLoS One 2012*
- ◇ Conventions: *ICWSM 2012, CIKM 2012, WWW 2012*
- ◇ Innovation: *PLoS One 2012, WWW 2022*
- ◇ Sentiment: *PLoS One 2015, ICWSM 2012, WWW 2022*
- ◇ Cascades: *Comp. Net 2012, IMC 2011, WWW 2009*

**Public Health**

- ◇ Mental Health: *JMIR 2023*
- ◇ Exercise and Sleep: *KDD 2019, JMU 2019, CSCW 2016*
- ◇ Depression: *CHB 2016, CSCW 2015, JMIR 2013, ICWSM 2013*

**Cultural Science**

- ◇ News: *Comput Hum Behav 2019, EPJ Data Sci 2014, WebSci 2013, ICWSM 2011*
- ◇ Fashion, Selfies: *JA 2021, ICWSM 2018, ICWSM 2017, COSN 2015*
- ◇ Emoticons: *J Commun 2014, COSN 2013, ICWSM 2013*
- ◇ Games: *WWW 2017, WWW 2013*
- ◇ Long-Tail Content: *TON 2009, IMC 2007*
- ◇ AI Ethics: *Frontiers 2021a, 2021b, CHI 2021, CSCW 2020*

**Network Science**

- ◇ User Modeling: *WWW 2014, InfoSci 2012, IMC 2012, IMC 2009*
- ◇ Influence: *ICWSM 2020, IEEE T Syst Man Cy A 2012, ICWSM 2010*
- ◇ Resilient Routing: *Comput Oper Res 2010, IMC 2008, Infocom 2006*

**SELECTED SERVICES****Technical Consulting**

Presidential Council on Intellectual Property in Korea	2020 – present
Wikimedia Foundation	2020 – present
World Customs Organization (WCO)	2019 – present
Korea Customs Service	2020 – present
Korea National Tax Service	2018 – present
Korea Internet Self-Governance Organization	2014 – present

**Editorial Board**

Future Internet	2019–present
PeerJ Journal	2018–present
ACM Transactions on Social Computing	2018–present
Int'l AAAI Conference on Web and Social Media (ICWSM)	2020–present

**Senior Program & Advisory Committee**

ACM Conference on Online Social Network (COSN)	2013–2017
Int'l AAAI Conference on Web and Social Media (ICWSM)	2013–2020
Int'l School and Conference on Network Science (NetSci)	2017–2018
Int'l Conference on Social Informatics (SocInfo)	2014

SELECTED  
GRANTS

- PI**, Data Science Research at the Pioneer Research Center for Mathematical and Computational Sciences, *Institute for Basic Science (IBS), Korea*  
 ◇ KRW 5,000,000,000 (4 Million USD) 2019.01–2023.12  
 ◇ Objective: Develop deep learning and machine learning-based computational methods to provide sensible answers to challenging real-world social problems e.g., develop computer vision algorithms to analyze high-resolution satellite images for poverty mapping.
- PI**, Research on trustworthy AI technology to counteract misinformation in heterogeneous big data, *National Research Foundation (NRF), Korea*  
 ◇ KRW 625,130,000 (500,000 USD) 2022.09–2027.02  
 ◇ Objective: Build computational models for a trustworthy AI information system.
- PI**, Exploring Fairness and Explainability for Responsible AI, *Institute for Information & Communication Technology Planning (IITP), Korea*  
 ◇ KRW 200,000,000 (160,000 USD) 2021.05–2023.04  
 ◇ Objective: Create explainable and fair AI models and talent development.
- PI**, Develop an AI-driven algorithm to test information veracity for heterogenous Web big data, *National Research Foundation (NRF), Korea*  
 ◇ KRW 600,000,000 (475,000 USD) 2017.11–2022.10  
 ◇ Objective: Build computational models of information propagation, particularly tackling misinformation based on million-scale data, which has huge social impact.
- Co-PI** with Kyomin Jung (PI, Seoul National University), Developing machine intelligence based conversation system that detects situations and responds to human emotions, *Ministry of Trade, Industry and Energy (MOTIE) of Korea*  
 ◇ KRW 1,500,000,000 2016.12–2021.12  
 ◇ Objective: Predict sentiments and contexts from unstructured text data
- Co-PI** with Dongman Lee (PI, KAIST), Juyong Park and Wonjae Lee (co-PIs, KAIST), Developing of Data Mining Core Technologies for Real-time Intelligent Information Recommendation in Smart Spaces, *Ministry of Science, ICT and Future Planning (MSIP) of Korea*  
 ◇ KRW 830,000,000 2015.07–2017.08  
 ◇ Objective: Utilize data gathered from IoT devices and Internet for context understanding
- Co-PI** with Miyin Yang (PI, Korea Youth Counseling & Welfare Institute), Dongil Kim (Seoul National University), and Taemin Song (Korea Institute for Health and Social Affairs), Big data-based prediction and prevention technologies for At-risk Youth, *Ministry of the Gender Equality and Family (MOGEF) of Korea*  
 ◇ KRW 9,500,000,000 for the group 2014.07–2015.03  
 ◇ Objective: Identify markers of depressive moods from online social network activities

TEACHING

- KAIST CS564/GCT564, Data Science Methodology 2012–2022  
 KAIST CS612, Social Network-Aware Ubiquitous Computing 2011–2015  
 KAIST GCT606, Digital Performance 2013  
 KAIST GCT673, Social Computing 2011  
 KAIST GCT561, Scientific Concept and Thinking 2011  
 KAIST GCT661, Networked Media 2010  
 KAIST CTP472, Social Media and Culture 2014  
 KAIST HSS091, Exciting College Life 2011  
 KAIST HSS090, Happy College Life 2011

## Publications List for Meeyoung Cha

### JOURNALS & CONFERENCES

H. Chin, G. Lima, M. Shin, A. Zhunis, C. Cha, J. Choi, and **M. Cha**\*. User-Chatbot Conversations During the COVID-19 Pandemic: A Study Based on Topic Modeling and Sentiment Analysis, In *Journal of Medical Internet Research (JMIR)*, To Appear (IF=7.08).

K. Singh, S. Lee, G. Labianca, J. M. Fagan, and **M. Cha**. Multi-Stage Learning for Hierarchical Tie Valence Prediction, In *ACM Transactions on Knowledge Discovery from Data (TKDD)*, To appear (IF=4.68).

S. Lee, X. Wang, S. Han, X. Yi, X. Xie, and **M. Cha**. Self-explaining deep models with logic rule reasoning, In *Advances in Neural Information Processing Systems (NeurIPS)*, 2022.  
<https://openreview.net/forum?id=8SY8ete3zu>

D. Kim, J. Won, E. Lee, K. Park, J. Kim, S. Park, H. Yang, and **M. Cha**. Disaster assessment using computer vision and satellite imagery: Applications in water-related building damage detection, In *Frontiers in Environmental Science*, 2022. (IF=4.75)  
<https://doi.org/10.3389/fenvs.2022.969758>

S. Han, S. Park, F. Wu, S. Kim, C. Wu, X. Xie, and **M. Cha**. FedX: Unsupervised Federated Learning with Cross Knowledge Distillation, In *proc. of the European Conference on Computer Vision (ECCV)*, 2022.  
[https://doi.org/10.1007/978-3-031-20056-4\\_40](https://doi.org/10.1007/978-3-031-20056-4_40)

J. Bian, S. Lee, K. Singh\*, and **M. Cha**. Exploring Text Summarization for Fake News Detection, In *Journal of KIISE*, 49(11), 926-935, 2022  
<https://doi.org/10.5626/JOK.2022.49.11.926>

M.-S. Kim, S. Park, **M. Cha**, and S.-W. Effects of Child Maltreatment on Physical Activity and Sleep in Healthy Adults: A Wearable Device Use Experiment, In *Journal of the Korean Society of Biological Therapies in Psychiatry*, Vol 28, No 2, 2022.  
<https://kmbase.medric.or.kr/Main.aspx?d=KMBASE&i=0605720220280020074&m=VIEW>

S. Park, K. Singh, T.-D. Mai, A. Nellikkattil, E. Zeller, and **M. Cha**. Downscaling Earth System Models with Deep Learning, In *proc. of the ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD)*, 2022. (Acceptance Rate = 25.8%)  
<https://doi.org/10.1145/3534678.3539031>

S. Kim, T.-D. Mai, S. Han, T. Nguyen, J. So, K. Singh, and **M. Cha**. Active Learning for Human-in-the-Loop Customs Inspection, In *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 2022. (IF=4.561)  
<https://ieeexplore.ieee.org/document/9695316>

H. Chin, C. Jung, G. Baek, C. Cha, J. Choi, and **M. Cha**. Understanding the Categories and Characteristics of Depressive Moods in Chatbot Data. In *KIPS Transactions on Software and Data Engineering*, 11, 9, 381-390, 2022. (KCI)  
<http://ktsde.kips.or.kr/digital-library/25979>

**J. Han**, Y. Lee, J. Kim, and **M. Cha**. News Comment Sections and Online Echo Chambers: The Ideological Alignment Between Partisan News Stories and Their User Comments, In *Journalism*, March, 2022. (IF=4.436)  
<https://doi.org/10.1177/14648849211069241>

G. Lima, J. Han, and **M. Cha**. Others Are to Blame: A Multi-Faceted View on How People Attribute Responsibility For Online Misinformation, In *proc. of the ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW)*, October 2022.  
<https://dl.acm.org/doi/10.1145/3512953>

G. Lima, N. Grgić-Hlača, J.K. Jeong, and **M. Cha**. The Conflict Between Explainable and Accountable Decision-Making In *proc. of the ACM Conference on Fairness, Accountability, and Transparency (FAccT)*, June 2022.  
<https://doi.org/10.1145/3531146.3534628>

S. Park, H. Song, S. Han, B. Weldegebriel, L. Manovich, E. Arielli, and **M. Cha**. Using Web Data to Reveal 22-Year History of Sneaker Designs, In *proc. of the Web Conference (WWW)*, April 2022. (Acceptance Rate = 17.7%) **Best Paper Candidate**  
<https://doi.org/10.1145/3485447.3512017>

A. Zhunis, G. Lima, J. Han, and **M. Cha**. Emotion Bubbles: Emotional Compositions of Online Discourse Before and After the COVID-19 Outbreak, In *proc. of the Web Conference (WWW)*, April 2022. (Acceptance Rate = 17.7%)  
<https://doi.org/10.1145/3485447.3512132>

K. Singh, G. Lima, **M. Cha\***, C. Cha, J. Kulshrestha, Y.-Y. Ahn, and O. Varol. Misinformation, believability, and vaccine acceptance over 40 countries: Takeaways from the initial phase of the COVID-19 infodemic, In *PLOS ONE*, February, 2022. (IF=3.752)  
<https://doi.org/10.1371/journal.pone.0263381>

S. Zihiria, G. Lima, J. Han, **M. Cha**, and W. Lee. QAnon Shifts Into the Mainstream, Remains a Far-Right Ally, In *Heliyon*, Vol 8, Issue 2, 2022  
<https://doi.org/10.1016/j.heliyon.2022.e08764>

S. Park, S. Han, D. Ahn, J. Kim, J. Yang, S. Lee, S. Hong, J. Kim, S. Park, H. Yang, and **M. Cha**. Learning economic indicators by aggregating multi-level geospatial information, In *proc. of the AAAI Conference on Artificial Intelligence (AAAI)*, February 2022. (Acceptance Rate=15%)  
<https://doi.org/10.1609/aaai.v36i11.21464>

S. Park, S. Kim, and **M. Cha**. Knowledge Sharing via Domain Adaptation in Customs Fraud Detection, In *proc. of the AAAI Conference on Artificial Intelligence (AAAI)*, February 2022. (Acceptance Rate=15%)  
<https://doi.org/10.1609/aaai.v36i11.21465>

J. Kim, D.Y. Wohn, and **M. Cha**. Understanding and identifying the use of emotes in toxic chat on Twitch, In *Elsevier Online Social Networks and Media (OSNEM)*, Vol 27, 2022.  
<https://doi.org/10.1016/j.osnem.2021.100180>

G. Lima, **M. Cha**, C. Jeon, and K. S. Park. The Conflict Between People's Urge to Punish AI and Legal Systems, In *Frontiers in Robots and AI*, 2021.  
<https://doi.org/10.3389/frobt.2021.756242>

S. Han, H. Song, S. Lee, S. Park, and **M. Cha**. Elsa: Energy-based Learning for Semi-supervised Anomaly Detection, In *proc. of the British Machine Vision Conference (BMVC)*, 2021.  
<https://www.bmvc2021-virtualconference.com/assets/papers/0451.pdf>

G. Lima, A. Zhunis, **L. Manovich**, and **M. Cha**. On the Social-Relational Moral Standing of AI: An Empirical Study Using AI-Generated Art, In *Frontiers in Robots and AI*, August, 2021.  
<https://doi.org/10.3389/frobt.2021.719944>

M. Babaei, A. Chakraborty, J. Kulshrestha, E.M. Redmiles, **M. Cha**, and K. Gummadi. Analyzing Biases in Perception of Truth in NewsStories and Their Implications for Fact Checking, In *IEEE Transactions on Computational Social Systems*, July, 2021. (SCIE, IF=5.36)  
<https://ieeexplore.ieee.org/document/9499338/>

H. Song, K. Park\* and **M. Cha\***. Finding Epic Moments in Live Content through Learning from Collective Decisions, In *EPJ Data Science*, 10:43, 2021. (SCIE, IF=5.08)  
<https://doi.org/10.1140/epjds/s13688-021-00278-7>

G. Lima, **M. Cha**, C. Cha, and H. Hwang. COVID-19 Vaccine Acceptance in the US and UK in the Early Phase of the Pandemic: AI-Generated Vaccines Hesitancy for Minors, and the Role of Governments, In *Journal of the Korean Data Analysis Society (JKDAS)*, 23(3), 1045–1064, June 2021.  
<https://doi.org/10.37727/jkdas.2021.23.3.1043>

O.-H. Kwon, I. Hong, J. Yang, D.Y. Wohn, W.-S. Jung\* and **M. Cha\***. Urban green space and happiness in developed countries, In *EPJ Data Science*, 2021. (SCIE, IF=5.08)  
<https://doi.org/10.1140/epjds/s13688-021-00278-7>

S. Park, J.Y. Park, J.H. Kang, H. Chin, and **M. Cha**. Experimental Study to Understand User Experience and Perception Bias Occurred by Fact-checking Messages, In proc. of the *Web Conference (WWW)*, April 2021. (Acceptance rate = 20.6%)  
<https://doi.org/10.1145/3442381.3450121>

S. Park, S. Han, S. Kim, D. Kim, S. Park, S. Hong, and **M. Cha**. Improving Unsupervised Image Clustering With Robust Learning, In proc. of the *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, June 2021. (Acceptance rate = 23.7%)  
<https://arxiv.org/abs/2012.11150>

S. Park, S. Han, J. Kim, M.M. Molaie, H.D. Vu, K. Singh, J. Han, W. Lee, and **M. Cha\***. COVID-19 Discourse on Twitter in Four Asian Countries: Case Study of Risk Communication, In *Journal of Medical Internet Research (JMIR)*, 23 (3), e23272, 2021.  
<https://doi.org/10.2196/23272>

Yuan Yuan, Muzhi Guan, Zhilun Zhou, Depeng Jin, Yong Li. Disruption in Chinese E-Commerce during COVID-19, In *Frontiers in Computer Science*, 2021.  
<https://doi.org/10.3389/fcomp.2021.668711>

S. Yoon, K. Park, M. Lee, T. Kim, M. Cha, and K. Jung\*, Learning to Detect Incongruence in News Headline and Body Text via a Graph Neural Network, *IEEE Access*, February 2021. (SCIE, IF=3.764)  
<https://doi.org/10.1109/ACCESS.2021.3062029>

**M. Cha\***, C. Cha, K. Singh, G. Lima, Y.-Y. Ahn, J. Kulshrestha, and O. Varol. Prevalence of Misinformation and Factchecks on the COVID-19 Pandemic in 35 Countries: Observational Infodemiology Study, In *JMIR Human Factors*, 8(1), January 2021.  
<https://doi.org/10.2196/23279>

Y. Ha, K. Park, S.J. Kim\*, J. Joo\*, and **M. Cha\***. Automatically Detecting Image-Text Mismatch on Instagram with Deep Learning, In *Journal of Advertising*, January 2021. (SSCI, IF=6.302)  
<https://doi.org/10.1080/00913367.2020.1843091>

S.Y. Bae, T. Kim, Yu-i Ha, and **M. Cha**. The Medium and the Backlash: The Disparagement of the #MeToo Movement in Online Public Discourse in South Korea, In *International Journal of Communication*, 15, 768–791, January 2021. (IF=1.28)

<https://ijoc.org/index.php/ijoc/article/view/14632/3350>

S. Park, S.W. Lee\*, D. Ahn, and **M. Cha**. Designing a Mobile Intervention Platform to Help Alleviate Insomnia Symptoms in College Students, In *Journal of Korean Society of Biological Psychiatry*, 27(1), 50–58, January 2021

<https://www.koreamed.org/SearchBasic.php?RID=2513155>

S. Park, J.Y. Park, J.-H. Kang, and **M. Cha\***. The presence of unexpected biases in online fact-checking, In *Harvard Kennedy School (HKS) Misinformation Review*, January 2020.

<https://doi.org/10.37016/mr-2020-53>

G. Lima, N. G.-H., and **M. Cha**. Human Perceptions on Moral Responsibility of AI: A Case Study in AI-Assisted Bail Decision-Making, In *proc. of the ACM CHI Conference on Human Factors in Computing Systems*, 2021. (Acceptance Rate=26.3%)

<https://doi.org/10.1145/3411764.3445260>

S.Y. Bae, T. Kim, Y. Ha, and **M. Cha**. The Medium and the Backlash: The Disparagement of the #MeToo Movement in Online Public Discourse in South Korea, In *International Journal of Communication*, 15:768–791, 2021. (IF=1.80)

<https://ijoc.org/index.php/ijoc/article/view/14632>

Y.-Z. Hsu, S. Han, S. Park, **M. Cha**, and C.-T. Li, A Comprehensive and Adversarial Approach to Unsupervised Embedding Learning, In *proc. of the IEEE International Conference on Big Data*, December 2020. (Acceptance Rate=15.5%)

<https://doi.org/10.1109/BigData50022.2020.9377844>

J. Han, **M. Cha**, and W. Lee, Anger contributes to the spread of COVID-19 misinformation, In *Harvard Kennedy School (HKS) Misinformation Review*, September 2020.

<https://doi.org/10.37016/mr-2020-39>

G. Lima, C. Kim, S. Ryu, C. Jeon, and **M. Cha**, Collecting the Public Perception of AI and Robot Rights, In *proc. of the ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW)*, October 2020.

<https://dl.acm.org/doi/10.1145/3415206>

S. Han, S. Park, S. Park, S. Kim, and **M. Cha**. Mitigating Embedding and Class Assignment Mismatch, In *proc. of the European Conference on Computer Vision (ECCV)*, August 2020.

<https://paperswithcode.com/paper/mitigating-embedding-and-class-assignment>

K. Park, G. Lima, **M. Cha**, and C. Jeon. Explaining the Punishment/Liability Gap of AI and Robots, In *proc. of the We Robot (International Conference on Law and Policy Relating to Robotics)*, August 2020.

<https://arxiv.org/pdf/2003.06507.pdf>

M. Guan, **M. Cha**, Y. Wang, J. Sun, and Y. Li. From Anticipation to Action: Data Reveal Mobile Shopping Patterns During a Yearly Mega Sale Event in China, *Transactions on Knowledge and Data Engineering (TKDE)*, June 2020. (SCI, IF=5.876)

<https://ieeexplore.ieee.org/document/9115271/>

S. Kim, Y.-C. Tsai, K. Singh, Y. Choi, E. Ibok, C.-T. Li, and **M. Cha**. DATE: Dual Attentive Tree-aware Embedding for Customs Fraud Detection, In *proc. of the ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD)*, 2020. (Acceptance Rate=16%)

<https://doi.org/10.1145/3394486.3403339>



S. Han, D. Ahn, S. Park, J. Yang, S. Lee, J. Kim, H. Yang, S. Park, and **M. Cha**. Learning to score economic development from satellite imagery, In *proc. of the ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD)*, 2020. (Acceptance Rate=16%)  
<https://doi.org/10.1145/3394486.3403347>

H. Song, K. Park, and **M. Cha\***. An Embedding Method of Emotes for the Detection of Popular Clips on Twitch.tv, Chat: Based on Deep Learning Model, In *Journal of KIISE*, 47(12), 1153–1161, December 2020  
<https://doi.org/10.5626/JOK.2020.47.12.1153>

J. Kim, D.Y. Wohn, and **M. Cha\***. Detection of Hate Speech with Emotes in Online Streaming Chat: Based on Deep Learning Model, In *Journal of KIISE*, 47(11), 1032–1037, November 2020  
<https://doi.org/10.5626/JOK.2020.47.11.1032>

H. Cha, S. Han, D. Ahn, S. Park, and **M. Cha\***. DPESSE: Daytime Satellite Imagery-based Prediction of Demographic Attributes Using Embedding Spatial Statistics, In *Journal of KIISE*, 47(8), 742–747, August 2020  
<https://doi.org/10.5626/JOK.2020.47.8.742>

**M. Cha\***, W. Gao, and C.-T. Li. Detecting Fake News in Social Media: An Asia-Pacific Perspective, In *Communications of the ACM (CACM)*, Vol 63, No 4, 68–71, 2020.  
<https://doi.org/10.1145/3378422>

K. Park, H. Kwak, H. Song, and **M. Cha**. “Trust me, I have a Ph.D.”: A propensity score analysis on the halo effect of disclosing one’s offline social status in online communities, In *proc. of the International AAAI Conference on Weblogs and Social Media (ICWSM)*, 2020. (Acceptance Rate=20%)  
<https://www.aaai.org/ojs/index.php/ICWSM/article/view/7321/7175>

S. Han, D. Ahn, H. Cha, J. Yang, S. Park, and **M. Cha**. Lightweight and Robust Representation of Economic Scales from Satellite Imagery, In *proc. of the AAAI Conference on Artificial Intelligence (AAAI)*, 2020.  
<https://aaai.org/ojs/index.php/AAAI/article/view/5379>

J. Kim, K. Park, H. Song, J.Y. Park, and **M. Cha**. Learning How Spectator Reactions Affect Popularity on Twitch, In *proc. of the IEEE Conference on Big Data and Smart Computing (BigComp)*, 2020.  
<https://ieeexplore.ieee.org/document/9070473>

F. Hashemi, A. Behrouz, J. Yang, D.Y. Wohn, and **M. Cha**. Green Space and Happiness of Developed Countries, In *proc. of the IEEE Conference on Big Data and Smart Computing (BigComp)*, 2020. (Short Paper)  
<https://ieeexplore.ieee.org/document/9070344>

S. Park, S.-W. Lee, S. Han, and **M. Cha\***. Clustering Insomnia Patterns by Data from Wearable Devices: Algorithm Development and Validation, In *JMIR mHealth and uHealth (JMUI)*, Vol 7, No 12, 2019. (SCI-E, IF=4.3)  
<https://doi.org/10.2196/14473>

Y.-C. Tsai, M. Guan, C.-T. Li, **M. Cha**, Y. Li, and Y. Wang. Predicting New Adopters via Socially-Aware Neural Graph Collaborative Filtering, In *International Conference on Computational Data and Social Networks (CSoNet)*, 2019.  
[https://link.springer.com/chapter/10.1007/978-3-030-34980-6\\_18](https://link.springer.com/chapter/10.1007/978-3-030-34980-6_18)



S. Park, C-T. Li, S. Han, C. Hsu, S.W. Lee, and **M. Cha**. Learning Sleep Quality from Daily Logs, In *proc. of the ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD)*, 2019. (Acceptance Rate=14%)

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