

JE HOON CHAE

RESEARCH INTEREST

Political Communication; Polarization; Political Psychology; Political Rhetoric.
Computational Social Science; Data Science; Causal Inference; Text-as-Data.

EDUCATION

- 2020 **Yonsei University**
M.S. in Media Communication
- 2017 **Yonsei University**
B.A. in Theology & Communication

WORKING PAPERS

4. **Chae, J. H.**, Lee, S. Y., & Song, H. (Under review). [Attitudinal Persuasion and Perceptual Backfire? Effects of Fact-Checking News Delivered by Partisan Media.](#)
3. Min, S., **Chae, J. H.**, Lee, J., & Lee, S. Y. (Drafting). [Image as Data: How Instagram photos reveal individual's characteristics and personality.](#)
2. Min, S., **Chae, J. H.**, & Han, S. (Drafting). [Event Segmentation in Memory for Real-World Social Events: A case study on COVID-19.](#)
1. Lee, J., **Chae, J. H.**, Min, S., & Lee, S. Y. (In preparation). Predicting Depression Symptom with Images: Application of auto-encoder.

CONFERENCE PRESENTATIONS

10. **Chae, J. H.**, Song, H., & Lee, S. Y. (2021, October). "Perceiving Fact-Checks as Biased but Nevertheless Persuaded? Effects of Fact-Checking News Delivered by Partisan Media," 117th *Annual Meeting of American Political Science Association (APSA)*, Virtual Conference.
9. **Chae, J. H.**, Song, H., & Lee, S. Y. (2021, August). "Perceiving Fact-Checks as Biased but Nevertheless Persuaded? Effects of Fact-Checking News Delivered by Partisan Media," 116th *Annual Meeting of American Sociological Association (ASA)*, Virtual Conference.
8. Min, S., **Chae, J. H.**, Lee, J., & Lee, S. Y. (2021, July). "Identifying individuals using topic patterns of Instagram photos," 7th *International Conference on Computational Social Science (IC²S²)*, Virtual Conference.
7. **Chae, J. H.**, Song, H., & Lee, S. Y. (2021, May). "Perceiving Fact-Checks as Biased but Nevertheless Persuaded? Effects of Fact-Checking News Delivered by Partisan Media," 71th *Annual Conference of International Communication Association (ICA)*, Virtual Conference.

6. Min, S., **Chae, J. H.**, & Han, S. (2020, August). "Event Segmentation in Memory for Real-world Social Events," *Annual Conference of the Korean Society for Cognitive & Biological Psychology*, Virtual Conference.
 · **Selected for The Best Presentation Award**
5. **Chae, J. H.**, & Lee, S. Y. (2020, July). "The Persuasion Effect of Fact-Checking News and Perceived Media Bias," *Annual Conference of the Korean Communication Association*, Dae-gu, Republic of Korea.
 · **Selected for The Best Graduate Student Paper (First Prize)**
4. Min, S., **Chae, J. H.**, Lee, J., & Lee, S. Y. (2020, July). "Image as Data: How Instagram Photos Reveal Individual's Characteristics and Personality," *Annual Conference of the Korean Psychology Association*, Virtual Conference.
3. **Chae, J. H.** (2019, October). "How News Media Covered #MeToo Movement: Application of Structural Topic Modeling and Word Embedding," *10th Honours Symposium for Asian Ph.D. Students in Communication Research*, Seoul, Republic of Korea.
2. **Chae, J. H.**, & Lee, S. Y. (2019, July). "News Framing of Refugee Issue in South Korea: Application of Topic Model," *5th International Conference on Computational Social Science (IC²S²)*, Amsterdam, Netherlands.
1. Min, S., **Chae, J. H.**, Lee, J., Park, J., & Kim, H. (2019, March). "Exploration of the Relationship Between Individual Psychological Traits and Behavioral Patterns on Social Media," *Yonsei Institute of Convergence Science Conference*, Seoul, Republic of Korea.

AWARDS & GRANTS

2020	Best Graduate Student Paper , Korean Society for Journalism & Comm. Studies	\$1,000
2020	Distinguished Dissertation Award , Yonsei University	
2018	Institute of Convergence Science (ICONS) , Yonsei University	\$3,000
2017–2020	Brain Korea 21+ , National Research Foundation (NRF)	\$12,000
2015	Academic Honor , Yonsei University	

TEACHING EXPERIENCES

Yonsei University (Graduate Invited Lecturer)

2020 Web-Scraping & Text Mining with Python, Department of Physical Education

Yonsei University (Undergraduate Teaching Fellow)

2019 COM4206: Communication Text Mining, Department of Communication
 2019 COM3128: Public Relations, Department of Communication
 2017 COM3144: Theories of Advanced Public Relation, Department of Communication

WORKING EXPERIENCES

2020–2022	Yongsan Ward's Office	<i>Mandatory Military Service</i>
2013	National Assembly	<i>Internship of Aide for Member of the National Assembly</i>

RESEARCH EXPERIENCES

- 2021 Research Assistant for Kyungmo Kim
- 2018–2020 Research Assistant for Sang Yup Lee
- 2017 Research Assistant for Jungho Han

LIFE EXPERIENCES

- 2014– **Backpacker**
Traversed Siberia from Vladivostok to Murmansk (Russia), Norway, Finland, North Pole (Svalbard), New Zealand, Hokkaido (Japan), Iceland, and Andalusia (Southern Spain).

TRAINING

- 2021–2022 Harvard University, Extension & Summer Program (Math & Statistics courseworks)
- 2021 Hartie School Data Science Summer School (DS3)
- 2021 Summer Institute for Computational Social Science (SICSS)
- 2021 University of Texas Austin, Summer Statistics Institute
- 2021 Deep Learning and Artificial Intelligence Summer School (DLAI5)
- 2019 4-weeks workshop of Generalized Linear Model, Korea Social Science Data Archive
- 2018 Linear Algebra for Data Science Workshop, Yonsei University
- 2018 Introduction to Statistics with R, Yonsei University

RELEVANT COURSEWORKS

Harvard University (Summer Program & Extension)

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| 2022 | MATH-E21B: Linear Algebra | <i>Prof. Robert Winters</i> |
| 2021 | GOV2001/STAT-E200: Quantitative Social Science Methods I | <i>Prof. Gary King</i> |
| 2021 | MATH-E23A: Linear Algebra & Real Analysis I | <i>Prof. Grant Murray</i> |
| 2021 | MATH-E156: Mathematical Statistics | <i>Prof. Dmitry Kurochkin</i> |
| 2021 | MATH-E16: Calculus II with Series & Differential Equations | <i>Prof. Srdjan Divac</i> |
| 2021 | MATH-S1A: Calculus I | <i>Prof. Carolyn Gardner-Thomas</i> |
| 2021 | CSCI-S50: Intensive Introduction to Computer Science | <i>Prof. David Malan</i> |

Yonsei University

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| 2020 | SOC7625: Mathematical Sociology | <i>Prof. Jeong Han Kang</i> |
| 2020 | COM6604: Online Data Analysis Seminar | <i>Prof. Sang Yup Lee</i> |
| 2020 | LIS8016: Seminar in Text Mining | <i>Prof. Min Song</i> |
| 2020 | POL6516: Political Psychology | <i>Prof. Shang E. Ha</i> |
| 2018 | COM6600: Online Data Collection and Analysis | <i>Prof. Sang Yup Lee</i> |
| 2016 | COM3164: Data Communication Science | <i>Prof. Young Min Baek</i> |

SKILLS

Statistical Modeling

Multi-level regression (`lme4`), Causal inference (matching, two-stage least square, difference in difference, regression discontinuity), Bayesian estimation (Markov Chain Monte Carlo, Variational Inference, `Stan`, `brms`), Mediation (`mediation`, `processR`), Time-series modeling (ARIMA, Hidden Markov Model, Vector Autoregression), Network analysis (ERGM, QAP)

Behavioral Data Analysis

Experimental design (`DeclareDesign`), Network-based experiment (`Empirica`, `breadboard`), Survey (`MTurk`, `Lucid`, `Qualtrics`, Google Forms)

Online Data Analysis

Web-scraping (`BeautifulSoup4`, `scrapy`, `Selenium`, Instagram Scraper), Social media data collection (`Tweepy`, `rtweet`)

Machine Learning

Penalized regression (Lasso, Ridge, Elastic Net), Dimensionality reduction (PCA, *t*-SNE, UMAP), Classification (KNN, Naive Bayes, Decision Tree, SVM, Ensemble Model), Unsupervised model (GMM, k-means), Deep Learning (CNN, RNN, LSTM, Elmo, BERT, GPT-3, GAN, Keras, PyTorch, TensorFlow)

Automated Text Analysis

Text pre-processing (`spaCy`, `nlTK`, `spacyr`, `quanteda`, `konlpy`, `soynlp`), Topic modeling (LSA, LDA, STM, `keyATM`, `rectr`), Sentiment analysis (Dictionary-based approach, LIWC, Supervised ML), Word embedding (`word2vec`, `Glove`, `fastText`, BERT)

Programming/Statistical Language and Tools

Programming language (Python, C, C++, JavaScript, Java), Statistical tools (R, Stata, SPSS, Jamovi, JASP), Other language or tools (`LaTeX`, Git, GitHub, SQL, HTML, CSS, Markdown)

REFERENCES

Sang Yup Lee

Professor of Communication & Digital Analytics
Department of Communication, Yonsei University
50, Yonsei-ro, Seodaemun-gu, Seoul, Republic of Korea
Email: sangyuplee@yonsei.ac.kr

Hyunjin Song

Professor of Communication
Department of Communication, Yonsei University
50, Yonsei-ro, Seodaemun-gu, Seoul, Republic of Korea
Email: hyunjinsong@yonsei.ac.kr

Kyungmo Kim

Professor of Communication
Department of Communication, Yonsei University
50, Yonsei-ro, Seodaemun-gu, Seoul, Republic of Korea
Email: kkmo@yonsei.ac.kr

(Additional references are available upon request)