## Yeseul, Jeon

Contact

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Information

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**EDUCATION** 

Yonsei University, Seoul, Republic of Korea.

Ph.D candidate, Applied Statistics and Data Science, February 2019 -

Sungshin women University, Seoul, Republic of Korea.

B.A., Statistics, February 2016.

#### **PUBLICATIONS**

- 1. **Jeon, Y.**, Jeon, H., Xie, J., Gupta, A. Jung, K., and Chung, D. (2023) Statistical Power Analysis for Designing Bulk, Single Cell, and Spatial Genomic Experiments: Review, Tutorial, and Perspectives. *Biomolecules*, 2023, 13(2), 221
- 2. Park, J., **Jeon, Y.**, Shin, M., Jeon, M., and Jin, I.H. (2022) Bayesian Shrinkage for Functional Network Models with Intractable Normalizng Constants. *Journal of Computational and Graphical Statistics*, Volume 31, 2022 Issue 2
- 3. **Jeon, Y.** and Kim, J. (2020) Identification of sentiment keywords association-based hotel network of hotel review using mapper method in topological data analysis. *The Korean Journal of Applied Statistics*, Vol. 33. No. 1: pp. 75-86.
- 4. **Jeon, Y.**, Jang, E., and Jang, H. (2019) Sentiment scores of sentiment keywords: analysis of hotel Review data. *Conference: International Conference Big Data Analytics, Data Mining and Computational Intelligence* 2019

## Submitted Manuscripts

- 1. **Jeon, Y.**, Chung, D., Park, J., and Jin, I.H. (2022) Network-based Topic Interaction Map for Big Data Mining of COVID-19 Biomedical Literature. Submitted to *Biometrics*. ArXiv:2106.07374.
- 2. **Jeon, Y.**, Chang, W., Jeong, S., and Park, J. (2022) A Bayesian Convolutional Neural Network-based Generalized Linear Model. Submitted to *Biometrics*. ArXiv:2210.09560.
- 3. **Jeon, Y.**, Kim, J., and Han, S. (2022) Interpretable Fusion Analytics Framework for fMRI Connectivity: Self-Attention Mechanism and Latent Space Item-Response Model Submitted to *Proceedings of the National Academy of Sciences of the United States of America*. ArXiv:2207.01581.

## Working Manuscripts

- 1. **Jeon, Y.**, Ben L., and Park, J. (2022) A Bayesian Deep Learning Spatial Interpolation
- 2. **Jeon, Y.**, Ben L., and Park, J. (2022) A Bayesian Subsampling in Highdimensional Spatio-temporal data
- 3. **Jeon, Y.** and Jin, I.H. (2022) Stochastic Hyperbolic Latent Space Network for Hierarchical Tree structure data
- 4. **Jeon, Y.**, Chang, W., Jin, I.H., and Chung, D. (2022) A Bayesian multivariate mixture model for spatial transcriptomics by integrating H&E morphological features with gene-expression data

## Invited Presentations

- Econometrics and Statistics (EcoSta 2021) June, 2021. Bayesian convolutional networks-based generalized linear model
- The Korean Statistical Society (KSS 2021) November, 2021. Baeysian convolutional networks-based generalized linear model
- Data Science DC (DSDC 2022), June, 2022. Network-based Trajectory Analysis of Topic Interaction Map for Text Mining of COVID-19 Biomedical Literature
- University of Notre Dame, Applied and Computational Mathematics and Statistics (ACMS) Seminar, November, 2022. Baeysian convolutional networksbased generalized linear model

# CONTRIBUTED PRESENTATIONS

- The Korean Statistical Society (KSS 2019), August, 2019. Topological data analysis in hotel review using mapper method
- International Conference Big Data Analytics (BigDaCI 2019), August, 2019. Sentiment scroes of sentiment keywords
- The Korean Statistical Society 2020 (KSS 2020), August, 2020
- Joint Statistical Meeting (JSM 2021), August, 2021. Network-based Trajectory Analysis of Topic Interaction Map for Text Mining of COVID-19 Biomedical Literature
- The International Society for Bayesian Analysis (ISBA 2022), Juen, 2022.
   Network-based Trajectory Analysis of Topic Interaction Map for Text Mining of COVID-19 Biomedical Literature
- Southern Regional Council on Statistics (SORCUS 2022), October, 2022.
   Interaction Map for Text Mining of COVID-19 Biomedical Literature

## AWARD AND GRANT

#### Grant

- International Research & Development Program of the National Research Foundation of Korea(NRF) funded by the Ministry of Science and ICT, December, 2021
  - Visiting scholar at Ohio State University June, 2022- May, 2023

#### Award

- Korean International Statistical Society (KISS) Outstanding Student Paper Award, January, 2023
- Student Travel Award: Southern Regional Council on Statistics, October, 2022
- JSM Award: Winning the Text Analysis Interest Group 2021 presentation competition, interest group of the ASA, August, 2021. Article.

### TEACHING Yonsei University

- Teaching Assistant
  - STAT 6160: Bayesian Statistics (Fall 2021)
  - STAT 6800: Statistical Analoysis of Network (Fall 2021)
  - STAT 1001: Principal of Statistics (Spring 2021, Fall 2021)
  - STAT 4117: Data Science2: Network Data Analysis for Data Science (Spring 2021)

## Sungshin Women's University

- Lecturer
  - CE052400: Statistical Computing with R (Spring 2022)
  - CE040900: Mathematical Statistics I (Spring 2022)

## Working Experience

# Vaiv Company (Daumsoft) (2016.01 - 2021.02)

- Researcher, Artificial Intelligence Lab
- National health alarm service (National Health Insurance Corporation)
- Company bankruptcy rate modeling (KEB Hana Bank)
- Company bankruptcy rate modeling (KEB Hana Bank)
- Chicken Index (Daumsoft)
- Food and medicine issue prediction modeling (Ministry of Food and Drug Safety)
- Brand index and campaign effectiveness index modeling (Daehong Company)
- Domestic travel tourism automatic analysis report (Information and Communication Industry Promotion Agency)
- Tourism index modeling (Korea Tourism Research Institute)
- Three major chronic disease risk modeling (Health Insurance Corporation)

# Vaiv Company (Daumsoft) (2015.07 - 2015.12)

- Fall Intern, Mining Search
- Epidemic diseases risk modeling

## **Shinhan Card** (2015.01 - 2015.02)

- Winter Intern, Big data Center
- Marketing strategy for college students based on card consumption data

Programming Languages R, Python, Rcpp, SAS, SQL, LaTeX.